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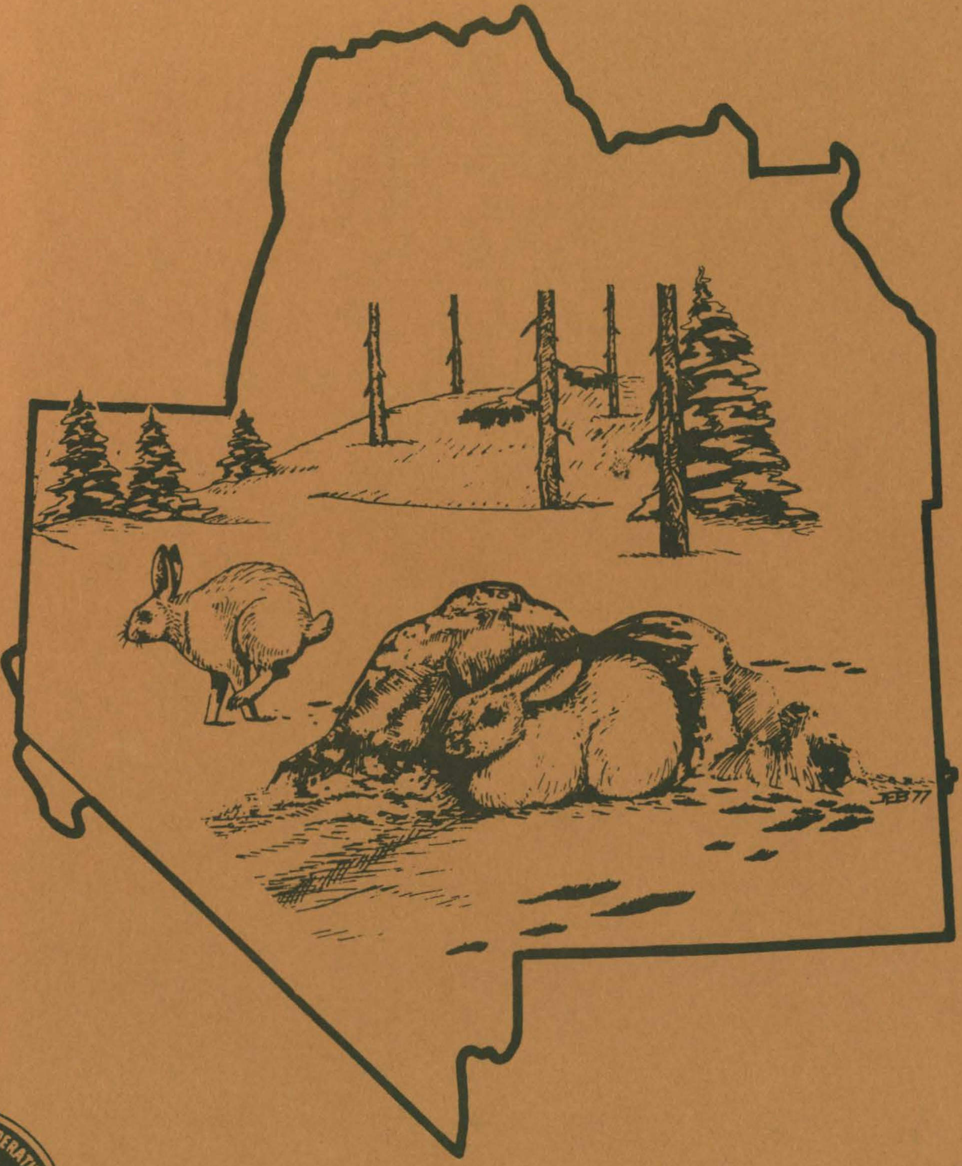
WILDLIFE REFERENCE

NATIONAL FOREST MANAGEMENT ACT
(1976 - PL 94-588)



NATIONAL FOREST SYSTEM · COOPERATIVE FORESTRY · FORESTRY RESEARCH
FOREST SERVICE
U.S. DEPARTMENT OF AGRICULTURE

"A GUIDE FOR FOREST LAND PLANNING"

INTERMOUNTAIN REGION

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The Intermountain Region of the Forest Service initiated the "Wildlife Action" Program in March of 1978.

Goal B.I. of "Wildlife Action" emphasized comprehensive wildlife planning. Objective A. called for guidelines to be developed for providing wildlife information for land management planning.

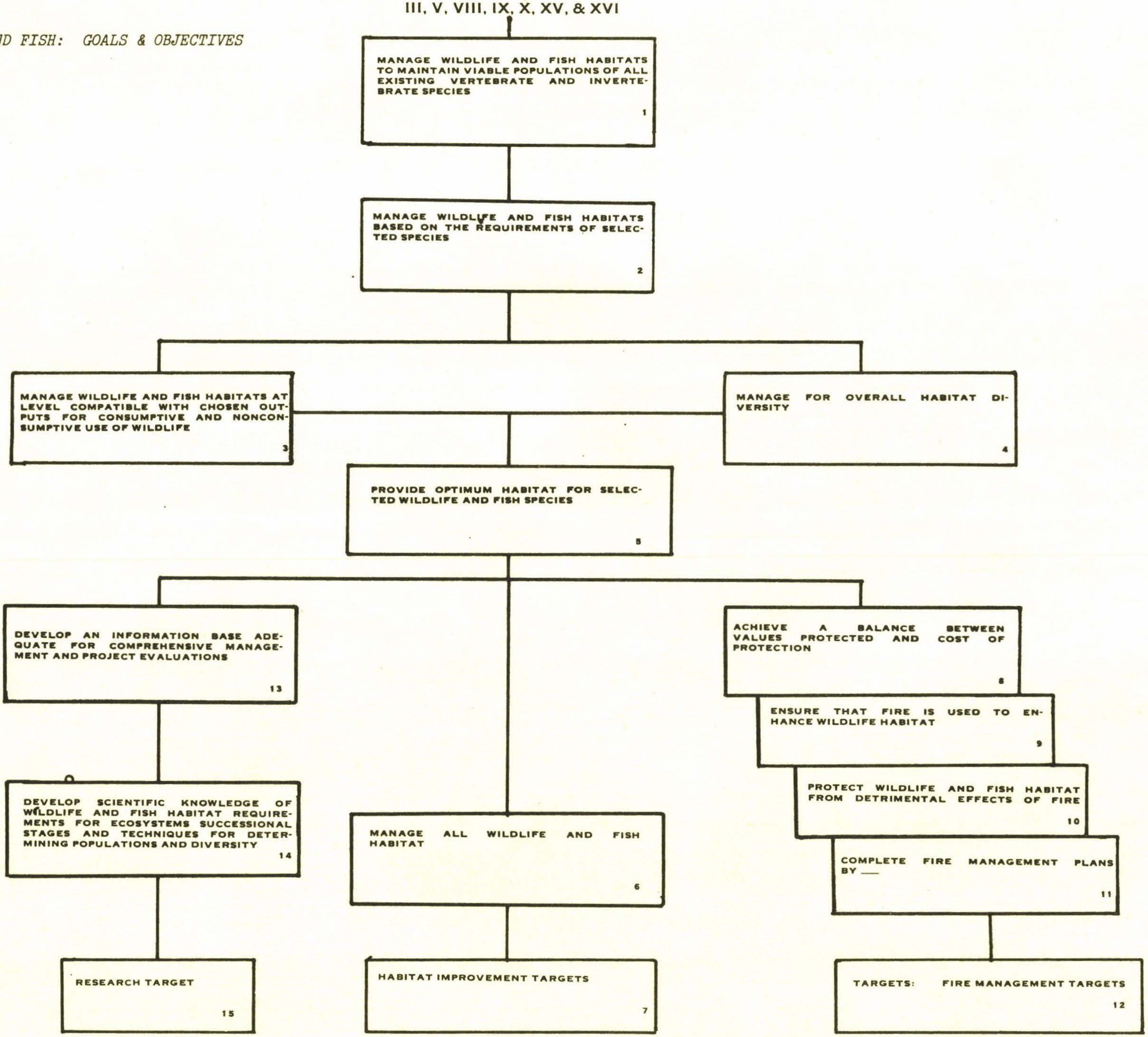
Wildlife reference to the National Forest Management Act of 1976 is intended to serve as a "guide for Forest land planning."

The Act contains some very specific tasks that must be addressed in the Forest land plan. Many changes from previous planning efforts are quite evident. We suggest as an initial effort that each individual working directly or indirectly on Forest land plans carefully review the Act itself. A copy is included in this reference document.

Other documents that will be helpful are "Wildlife Action" and "An Economic Evaluation of The Value of Wildlife" by Dr. Chris Hansen.

REGIONAL GOALS
AND
OBJECTIVES

F. WILDLIFE AND FISH: GOALS & OBJECTIVES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REGIONAL WILDLIFE GUIDELINES

F. GUIDELINES FOR WILDLIFE

1. To manage habitats for wildlife and fish to maintain viable populations of all existing resident and migratory vertebrate and invertebrate species, Forest Supervisors will:
   - Identify habitat types.
   - Identify both resident and migratory species of wildlife and fish.
   - Establish habitat type/species relationship.

2. To manage habitats of wildlife and fish according to requirements of selected species, Forest Supervisors will:
   - Identify selected species. Selected species to be identified are:
     1. Threatened and endangered species included on either State or federal lists.
     2. Habitat-specific species.
     3. Indicator species.
     4. Species that are commonly hunted, fished, or trapped.
   - Assure that State wildlife agencies become involved in the selection process.

3. In order to manage habitats of wildlife and fish at levels compatible with chosen outputs for consumptive and nonconsumptive use of wildlife and fish, Forest Supervisors will:
   - Estimate existing and potential demand of consumptive and nonconsumptive use of wildlife and fish.
   - Identify existing supply of wildlife and fish available for both consumptive and nonconsumptive use produced on NFS lands.
   - Estimate the capability, suitability, and availability of NFS lands to supply wildlife and fish for future use.
   - Relate the capability, suitability, and availability of NFS lands to supply wildlife and fish to the goals and objectives outlined by the State wildlife agencies.
   - Recognize and identify nationally and regionally significant wildlife populations.

4. To manage for overall habitat diversity, Forest Supervisors will:
    - Determine quality and quantity of habitat needed to support viable populations of indicator, habitat-specific, and threatened and endangered species.
    - Determine population trends of these species.
    - Map and quantify potential and existing conditions and establish trends of habitat types utilized by these species.
    - Identify habitat types where diversity could be increased.

5. In order to provide optimum habitat for selected species of wildlife and fish, Forest Supervisors will:
    - Manage wildlife and fish on National Forest System lands to provide for overall species diversity.
    - Determine quality and quantity of habitat needed to produce Forest's fair share of wildlife and fish and to comply with the T&E Act.
    - Identify tradeoffs that occur between species due to management direction.
    - Establish in cooperation with State and other Federal agencies specific objectives for management of each habitat type.
    - Select cultural treatments which favor tree species and age classes which are valuable for wildlife.
    - Preserve natural diversity of tree species.
    - Select management systems for other resources that favor the habitat objectives for the selected species.
    - Provide enough high quality water to provide for wildlife and fish.

6. In order to manage all wildlife and fish habitat, Forest Supervisors will:
    - Determine what specific land management practices are needed to meet fish and wildlife objectives.
    - Consult with the State to update and revise Statewide comprehensive plans to provide a program, by priority of selected species, to place all wildlife and fish habitat under improved management by 1984.
    - Program a substantial increase of habitat improvement.
    - Use funds from all appropriate sources for identified planned improvement of wildlife and fish habitat.

- Develop recovery plans in conjunction with the State wildlife agency and U.S. Fish and Wildlife Service.
- Implement habitat improvements and/or management programs specified in these recovery plans.
- Improve key ecosystems including, but not limited to, riparian, aspen, aquatic, snag, and old growth.
- Develop monitoring techniques to test and measure accuracy of criteria for species selection and achievement of management objectives.
- Use all opportunities to encourage application of sound wildlife habitat management principles on adjacent nonfederal forest lands.

9. In order to ensure that fire is used to enhance wildlife habitat, Forest Supervisors will:
    - Implement escape fire analysis based on land management objectives.
    - Utilize prescribed fire to maintain or enhance wildlife habitat.

10. In order to protect wildlife and fish habitat from detrimental effects of fire, Forest Supervisors will:
    - Determine role of fire in each habitat type.
    - Identify areas where fire needs to be excluded.
    - Seek protection interchange with other agencies that have protection abilities.
    - Base needs for revegetation of burned areas on habitat management objectives.

FY 1979-1995

HABITAT IMPROVEMENT GOALS

Target:
Direct Habitat Improvement
Fish Habitat
M AC EQ 7

NATIONAL FORESTS	Programed FY 1979	Targets		
		FY 1981		FY 1995
		Low	High	
ASHLEY	.011	.094	.085	.098
BOISE	.034	.094	.237	.358
BRIDGER-TETON		.092	.118	.489
CARIBOU	.01	.094	.068	.392
CHALLIS		.094	.085	.195
DIXIE	.01	.094	.068	.195
FISHLAKE	.07	.094	.085	.098
HUMBOLDT		.094	.068	.065
MANTI-LASAL		.094	.068	.065
PAYETTE		.094	.134	.098
SALMON	.098	.094	.085	.163
SAWTOOTH	.075	.094	.287	.456
TARGHEE	.0594	.094	.085	.293
TOIYABE		.094	.085	.065
UINTA	.01	.094	.068	.033
WASATCH-CACHE	.02	.094	.068	.195
REGIONAL OFFICE			.752	2.965
TOTALS	.3974	1.497	2.446	6.223

Target:
Direct Habitat Improvement
Wildlife Habitat
M AC EQ 7

NATIONAL FORESTS	Programed FY 1979	Targets		
		FY 1981		FY 1995
		Low	High	
ASHLEY	5.12	4.008	9.2	51.9
BOISE	35.67	5.274	16.2	58.2
BRIDGER-TETON	10.7	5.280	11.2	46.4
CARIBOU	14.96	5.274	7.7	21.2
CHALLIS	2.32	5.274	5.4	33.0
DIXIE	5.245	4.006	14.8	72.3
FISHLAKE	5.180	4.006	7.0	63.7
HUMBOLDT	8.751	5.200	17.3	66.8
MANTI-LASAL	12.20	4.006	7.0	55.8
PAYETTE	1.55	5.200	8.6	27.5
SALMON	3.055	4.006	8.1	19.7
SAWTOOTH	3.250	5.274	8.3	35.4
TARGHEE	17.840	5.274	8.4	43.3
TOIYABE	13.935	5.400	15.7	63.7
UINTA	.620	5.274	20.3	75.5
WASATCH-CACHE	1.665	4.008	14.8	51.9
REGIONAL OFFICE				
TOTALS	142.061	78.06	180.0	786.3

SPECIES LISTS

A List of the Birds of the Intermountain Region of the Forest Service

Order GAVIIFORMES

Family Gaviidae

1. *Gavia arctica* (Linnaeus) arctic loon
2. *Gavia immer* (Brunnich) common loon
3. *Gavia stellata* (Pontoppidan) red-throated loon

Order PODICIPEDIFORMES

Family Podicipedidae

4. *Aechmophorus occidentalis* (Lawrence) western grebe
5. *Podiceps auritus* (Linnaeus) horned grebe
6. *Podiceps caspicus* (Hablizl) eared grebe
7. *Podiceps grisegena* (Boddaert) red-necked grebe
8. *Podilymbus podiceps* (Linnaeus) pied-billed grebe

Order PELECANIFORMES

Family Pelencanidae

9. *Pelecanus erythrorhynchos* (Gmelin) white pelican
10. *Pelecanus occidentalis* (Linnaeus) brown pelican

Family Phalacrocoracidae

11. *Phalacrocorax auritus* (Lesson) double-crested cormorant

Order CICONIIFORMES

Family Ardeidae

12. *Ardea herodias* (Linnaeus) great blue heron
13. *Botaurus lentiginosus* (Rackett) american bittern
14. *Burorides virescens* (Linnaeus) great heron
15. *Bubulcus ibis* cattle egret
16. *Casmerodius albus* (Linnaeus) common egret
17. *Florida caerula* (Linnaeus) little blue heron
18. *Ixobrychus exilis* (Gmelin) least bittern
19. *Leucophoyx thula* (Molina) snowy egret
20. *Nycticorax nycticorax* (Linneaus) black-crowned night heron

Family Ciconiidae

21. *Mycteria americana* (Linnaeus) wood ibis

Family Threskiornithidae

22. *Ajaia ajaja* (Linnaeus) roseate spoonbill
23. *Pelegadis chihi* (Vieillot) white-faced ibis

Family Phoenicopteridae

24. *Phoenicopterus ruber* (Linnaeus) american flamingo

Order ANSERIFORMES

Family Anitidae

25. *Anas acuta* (Linnaeus) pintail
26. *Anas carolinensis* (Gmelin) green-winged teal
27. *Anas cyanoptera* (Vieillot) cinnamon teal
28. *Anas discors* (Linnaeus) blue-winged teal
29. *Anas platyrhinchos* (Linnaeus) mallard
30. *Anas rubripes* (Brewster) black duck
31. *Anas strepera*(Linnaeus) gadwall
32. *Anser albifrons* (Scopoli) white-fronted goose
33. *Aix sponsa* (Linnaeus) wood duck
34. *Aythya affinis* (Eyton) lesser scaup
35. *Aythya americana* (Eyton) redhead
36. *Aythya collaris* (Donovan) ring-necked duck
37. *Aythya marila* (Linnaeus) greater scaup
38. *Aythya valisineria* (Wilson) canvasback
39. *Branta Canadeansis)*(Linnaeus) Canada goose
40. *Branta nigricans* (Lawrence) black brant
41. *Bucephala albeola* (Linnaeus) bufflehead
42. *Bucephala clangula* (Linnaeus) common goldeneye
43. *Bucephala islandica* (Gmelin) barrow's goldeneye
44. *Chen caerulescens* (Linnaeus) blue goose
45. *Chen hyperborea* (Pallas) snow goose
46. *Chen rossii* (Cassin) Ross' goose
47. *Clangula hyemalis* (Linnaeus) oldsquaw
48. *Dendrocygna bicolor* (Vieillot) fulvous tree duck
49. *Histrionicus histrionicus* (Linnaeus) harlequin duck
50. *Lophodytes cacullatus* (Linnaeus) hooded merganser
51. *Mareca americana* (Gmelin) american widgeon
52. *Mareca penelope* (Linnaeus) european widgeon
53. *Melanitta deglandi* (Bonaparte) white-winged scoter
54. *Melanitta perspicillata* (Linnaeus) surf scoter
55. *Mergus merganser* (Linnaeus) common merganser
56. *Mergus serrator* (Linnaeus) red-breasted merganser
57. *Olor buccinator* (Richardson) trumpeter swan
58. *Olor columbianus* (Ord) whistling swan
59. *Oxyura jamaicensis* (Gmelin) ruddy duck
60. *Spatula clypeata* (Linnaeus) shoveler

Order FALCONIFORMES

Family Cathartidae

61. *Cathartes aura* (Linnaeus) turkey vulture
62. *Gymnogyps californianus* (Shaw) California condor

Family Accipitridae

63. *Accipiter cooperii* (Bonaparte) cooper's hawk
64. *Accipiter gentilis* (Linnaeus) goshawk
65. *Accipiter striatus* (Vieillot) sharp-shinned hawk
66. *Aguila chrysaetos* (Linnaeus) golden eagle
67. *Buteo jamaicensis* (Gmelin) red-tailed hawk
68. *Buteo lagopus* (Pontoppidan) rough-legged hawk
69. *Buteo lineatus* (Gmelin) red-shouldered hawk
70. *Buteo regalis* (Gray) ferruginous hawk
71. *Buteo swainsoni* (Bonaparte) Swainson's hawk
72. *Circus cyaneas* (Linnaeus) marsh hawk
73. *Haliaeetus leucooephalus* (Linnaeus) bald eagle
74. *Parabuteo unicinctus* (Temminck) Harris' hawk

Family Pandionidae

75. *Pandion haliaetus* (Linnaeus) osprey

Family Falconidae

76. *Falco columbarius* (Linnaeus) pigeon hawk (Merlin)
77. *Falco mexicanus* (Schlegel) prairie falcon
78. *Falco peregrinus* (Tunstall) peregrine falcon
79. *Falco rusticolus* (Linnaeus) gyrfalcon
80. *Falco sparverius* (Linnaeus) sparrow hawk

Order Galliformes

Family Tetraonidae

81. *Bonasa umbellus* (Linnaeus) ruffed grouse
82. *Centrocercus urophasianus* (Bonaparte) sage grouse
83. *Canachites canadensis* spruce grouse
84. *Dendragapus obscurus* (Say) blue grouse
85. *Lagopus leucurus* (Richardson) white-tailed ptarmigan
86. *Pediocetes phasianellus* (Linnaeus) sharp-tailed grouse

Family Phasianidae

87. *Alectoris graeca* (Meisner) chukar
88. *Colinus virginianus* bobwhite
89. *Lophortyx californicus* (Shaw) California quail
90. *Lophortyx gambelii* (Gambel) Gambel's quail
91. *Meleagris gallopavo* (Linnaeus) turkey
92. *Oreortyx pictus* (Douglas) mountain quail
93. *Perdix perdix* (Linnaeus) gray partridge
94. *Phasianus colchicus* (Linnaeus) ring-necked pheasant

Order GRUIFORMES

Family Gruidae

95. *Grus canadensis* (Linnaeus) sandhill crane

Family Rallidae

96. *Coturnicops noveboracensis* (Gmelin) yellow rail
97. *Fulica americana* (Gmelin) american coot
98. *Gallinula chloropus* (Linnaeus) common gallinule
99. *Porphyrula martinica* (Linnaeus) purple gallinule
100. *Porzana carolina* (Linnaeus) sora
101. *Rallus limicola* (Vieillot) Virginia rail

Order CHARADRIIFORMES

Family Haematopodidae

102. *Haematopus bachmani* (Audubon) black oystercatcher

Family Charadriidae

103. *Arenaria interpres* (Linnaeus) ruddy trunstone
104. *Charadrius alexandrinus* (Linnaeus) snowy plover
105. *Charadrius semipalmatus* (Bonaparte) semipalmated plover
106. *Charadrius vociferus* (Linnaeus) killdeer
107. *Eupoda montana* (Townsend) mountain plover
108. *Pluvialis dominica* (Muller) american golden plover
109. *Squatarola squatarola* (Linnaeus) black-bellied plover

Family Scolopacidae

110. *Actitis macularia* (Linnaeus) spotted sandpiper
111. *Bartramia longicauda* (Bechstein) upland plover
112. *Calidris canutus* (Linnaeus) knot
113. *Capella gallinago* (Linnaeus) common snipe
114. *Cataptrophorus semipalmatus* (Gmelin) willet
115. *Crocethia alba* (Pallas) sanderling
116. *Ereunetes mauri* (Cabanis) western sandpiper
117. *Ereunetes pusillus* (Linnaeus) semipalmated sandpiper
118. *Erolia alpina* (Linnaeus) dunlin
119. *Erolia bairdii* (Coues) Baird's sandpiper
120. *Erolia melanotos* (Vieillot) pectoral sandpiper
121. *Erolia minutilla* (Vieillot) least sandpiper
122. *Limnodromus griseus* (Gmelin) short-billed dowitcher
123. *Limnodromus scolopaceus* (Say) long-billed dowitcher
124. *Limosa fedoa* (Linnaeus) marbled godwit
125. *Micropalama himantopus* (Bonaparte) stilt sandpiper
126. *Numenius americanus* (Bechstein) long-billed curlew
127. *Numenius phaeopus* (Linnaeus) whimbrel
128. *Totanus flavipes* (Gmelin) lesser yellowlegs
129. *Totanus melanoleucus* (Gmelin) greater yellowlegs
130. *Tringa solitaria* (Wilson) solitary sandpiper

Family Recurvirostridae

131. *Himantopus mexicanus* (Muller) black-necked stilt
132. *Recurvirostra americana* (Gmelin) american avocet

Family Phalaropodidae

133. *Lobipes labatus* (Linnaeus) northern phalarope
134. *Phalaropus fulicarius* (Linnaeus) red phalarope
135. *Steganopus tricolor* (Vieillot) Wilson's phalarope

Family Stercorariidae

136. *Stercorarius longicaudus* (Vieillot) long-tailed jaeger
137. *Stercorarius parasiticus* (Linnaeus) parasitic jaeger

Family Laridae

138. *Chlidonias niger* (Linnaeus) black tern
139. *Hydroprogne caspia* (Pallas) caspian tern
140. *Larus argentatus* (Pontoppidan) herring gull
141. *Larus californicus* (Lawrence) California gull
142. *Larus delawarensis* (Ord) ring-billed gull
143. *Larus glaucenscens* (Naumann) glaucous-winged gull
144. *Larus heermanni* (Cassin) Heermann's gull
145. *Larus occidentalis* (Audubon) western gull
146. *Larus philadelphis* (Ord) Bonaparte's gull
147. *Larus pipixcan* (Wagler) Franklin's gull
148. *Sterna albifrons* (Pallas) least tern
149. *Sterna forsteri* (Nuttall) Forster's tern
150. *Sterna hirundo* (Linnaeus) common tern
151. *Xema sabini* (Sabine) Sabine's gull

Family Alcidae

152. *Synthliboramphus antiquum* (Gmelin) ancient murrelet

Order COLUMBIFORMES

Family Columbidae

153. *Columba fasciata* (Say) band-tailed pigeon
154. *Columba livia* (Gmelin) rock dove
155. *Columbigallina passerina* (Linnaeus) ground dove
156. *Ectopistes migratorius* (Linnaeus) passenger pigeon
157. *Scardafella inca* (Lesson) inca dove
158. *Streptopalia risoris* (Linnaeus) ringed turtle dove
159. *Zenaida asiatica* (Linnaeus) white-winged dove
160. *Zenaidura macroura* (Linnaeus) mourning dove

Order CUCULIFORMES

Family Cuculidae

161. *Coccyzus americanus* (Linnaeus) yellow-billed cuckoo
162. *Coccyzus erythropthalmus* (Wilson) black-billed cuckoo
163. *Crotophaga sulcirostris* (Swainson) groove-billed ani
164. *Geococcyx californianus* (Lesson) roadrunner

Order STRIGIFORMES

Family Tytonidae

165. *Aegolius acadicus* (Gmelin) saw-whet owl
166. *Asio flammeus* (Pontoppidan) short-eared owl
167. *Asio otus* (Linnaeus) long-eared owl
168. *Bubo virginianus* (Gmelin) great horned owl
169. *Glaucidium gnoma* (Wagler) pygmy owl
170. *Nyctea scandiaca* (Linnaeus) snowy owl
171. *Otus asio* (Linnaeus) screech owl
172. *Otus flammeolus* (Kaup) flammulated owl
173. *Speotyto cunicularia* (Molina) burrowing owl
174. *Strix occidentalis* (Xantus) spotted owl
175. *Tyto alba* (Scopoli) barn owl

Order CAPRIMULGIFORMES

Family Caprimulgidae

176. *Caprimulgus vociferus* (Wilson) whip-poor-will
177. *Chordeiles acutipennis* (Hermann) lesser nighthawk
178. *Chordeiles minor* (Forster) common nighthawk
179. *Phalaenoptilus nuttallii* (Audubon) poor-will

Order APODIFORMES

Family Apodidae

180. *Aeronautes saxatalis* (Woodhouse) white-throated swift
181. *Chaetura pelagica* (Linnaeus) chimney swift
182. *Chaetura vauxi* (Townsend) Vaux's swift
183. *Cypseloides niger* (Gmelin) black swift

Family Trochilidae

184. *Archilochus alexandri* (Bourcier and Mulsant) black-chinned hummingbird
185. *Calypte anna* (Lesson) Anna's hummingbird
186. *Calypte costae* (Bourcier) Costa's hummingbird
187. *Selasphorus platycercus* (Swainson) broad-tailed hummingbird
188. *Selasphorus rufus* (Gmelin) rufous hummingbird
189. *Stellula calliope* (Gould) calliope hummingbird

Order CORACIIFORMES

Family Alcedinidae

190. *Megaceryle alcyon* (Linnaeus) belted kingfisher

Order PICIFORMES

Family Picidae

191. *Asyndesmus lewis* (Gray) Lewis' woodpecker
192. *Centurus uropygialis* (Baird) Gila woodpecker
193. *Colaptes cafer* (Gmelin) red-shafted flicker
194. *Dendrocopos albolarvatus* (Cassin) white-headed woodpecker
195. *Dendrocopus pubescens* (Linnaeus) downy woodpecker
196. *Dendrocopus scalaris* (Wagler) ladder-backed woodpecker
197. *Dendrocopus villosus* (Linnaeus) hairy woodpecker
198. *Dryopicus pileatus* (Linnaeus) pileated woodpecker
199. *Melanerpes erythrocephalus* (Linnaeus) red-headed woodpecker
200. *Melanerpes formicivorus* (Swainson) acorn woodpecker
201. *Picoides arcticus* (Swainson) black-backed three-toed woodpecker
202. *Picoides tridactylus* (Linnaeus) northern three-toed woodpecker
203. *Sphyrapicus throideus* (Cassin) Williamson's sapsucker
204. *Sphyrapicus varius* (Linnaeus) yellow-bellied sapsucker

Order PASSERIFORMES

Family Tyrannidae

205. *Contopus sordidulus* (Sclater) western wood pewee
206. *Empidonax difficilis* (Baird) western flycatcher
207. *Empidonax hammondii* (Xantus) Hammond's flycatcher
208. *Empidonax minimus* least flycatcher
209. *Empidonax oberholseri* (Phillips) dusky flycatcher
210. *Empidonax traillii* (Audubon) Traill's flycatcher
211. *Empidonax wrightii* (Baird) gray flycatcher
212. *Muscivora forficata* (Gmelin) scissor-tailed flycatcher
213. *Myiarchus cinerascens* (Lawrence) ash-throated flycatcher
214. *Myiarchus tyrannulus* (Muller) Weid's crested flycatcher
215. *Nuttallornis borealis* (Swainson) olive-sided flycatcher
216. *Pyrocephalus rubinus* (Boddaert) Vermilion flycatcher
217. *Sayornis nigricans* (Swainson) black phoebe
218. *Sayornis saya* (Bonaparte) Say's phoebe
219. *Tyrannus tyrannus* (Linnaeus) eastern kingbird
220. *Tyrannus verticalis* (Say) western kingbird
221. *Tyrannus vociferans* (Swainson) Cassin's kingbird

Family Alaudidae

222. *Eromophila alpestris* (Linnaeus) horned lark

Family Hirundinidae

223. *Hirundo rustica* (Linnaeus) barn swallow
224. *Iridoprocne bicolor* (Vieillot) tree swallow
225. *Petrochelidon pyrrhonota* (Vieillot) cliff swallow
226. *Progne subis* (Linnaeus) purple martin
227. *Riparia riparia* (Linnaeus) bank swallow
228. *Stelgidopteryx ruficollis* (Vieillot) rough-winged swallow
229. *Tachycineta thalassina* (Swainson) violet-green swallow

Family Corvidae

230. *Aphlecoma coerulescens* (Boxc) scrub jay
231. *Aphlecoma ultramarian* (Bonaparte) Mexican jay
232. *Corvus brachyrhynchos* (Brehm) common crow
233. *Corvus corax* (Linneaus) common raven
234. *Cyanocitta stelleri* (Gmelin) Steller's jay
235. *Gymnorhinus cyanocaphala* (Wied) pinon jay
236. *Nucifraga comumbaina* (Wilson) Clark's nutcracker
237. *Perisoreus canadensis* (Linnaeus) gray jay
238. *Pica pica* (Linneaus) black-billed magpie

Family Paridae

239. *Auriparus flaviceps* (Sundevall) verdin
240. *Parus atricapillus* (Linnaeus) black-capped chickadee
241. *Parus gambeli* (Ridgway) mountain chickadee
242. *Parus inornatus* (Gambel) plain titmouse
243. *Psaltriparus minimum* (Townsend) common bushtit

Family Sittidae

244. *Sitta candensis* (Linnaeus) red-breasted nuthatch
245. *Sitta carolinensis* (Latham) white-breasted nuthatch
246. *Sitta pygmaea* (Vigors) pigmy nuthatch

Family Certhiidae

247. *Certhia familiaris* (Linnaeus) brown creeper

Family Cinclidae

248. *Cinclus mexicanus* (Swainson) dipper

Family Troglodytidae

249. *Campylorhynchus brunneicapillum* (Lafresnaye) cactus wren
250. *Catherpes mexicanus* (Swainson) canon wren
251. *Salpinctes obsoletus* (Say) rock wren
252. *Telmatodytes palustris* (Wilson) long-billed marsh wren
253. *Thryomanes bewickii* (Audubon) Bewick's wren
254. *Troglodytes aedon* (Vieillot) house wren
255. *Troglodytes troglodytes* (Linnaeus) winter wren

Family Mimidae

256. *Dumetella carolinensis* (Linnaeus) catbird
257. *Mimus polyglottos* (Linnaeus) mockingbird
258. *Oreoscoptes montanus* (Townsend) sage thrasher
259. *Toxostoma bendirei* (Coues) Bendire's thrasher
260. *Toxostoma curvirostre* (Swainson) curve-billed thrasher
261. *Toxostoma dorsale* (Henry) crissal thrasher
262. *Toxostoma lecontei* (Lawrence) LeConte's thrasher
263. *Toxostoma rufum* (Linnaeus) brown thrasher

Family Turdidae

264. *Hylocichla fuscenscens* (Stephens) veery
265. *Hylocichla guttata* (Pallas) hermit thrush
266. *Hylocichla ustulata* (Nuttall) Swainson's thrush
267. *Ixoreus naevius* (Gmelin) varied thrush

268. *Myadestes townsendi* (Audubon) Townsend's solitaire
269. *Sialia currucoides* (Bechstein) mountain bluebird
270. *Sialia mexicana* (Swainson) western bluebird
271. *Turdus migratorius* (Linnaeus) robin

Family Sylviidae

272. *Polioptila caerulia* (Linnaeus) blue-gray gnatcatcher
273. *Polioptila melanura* (Lawrence) black-tailed gnatcatcher
274. *Regulus calendula* (Linnaeus) ruby-crowned kinglet
275. *Regulus satrapa* (Lichtenstein) golden-crowned kinglet

Family Motacillidae

276. *Anthus spinoletta* (Linnaeus) water pipit

Family Bombycillidae

277. *Bombycilla cedrorum* (Vieillot) cedar waxwing
278. *Bombycilla quarrula* (Linnaeus) bohemian waxwing

Family Ptilogonatidae

279. *Phainopepla nitens* (Swainson) phainopepla

Family Laniidae

280. *Lanius excubitor* (Linnaeus) northern shrike
281. *Lanius ludovicianus* (Linnaeus) loggerhead shrike

Family Sturnidae

282. *Sturnus vulgaris* (Linnaeus) starling

Family Vireonidae

283. *Vireo bellii* (Audubon) Bell's vireo
284. *Vireo flavifrons* (Vieillot) yellow-throated vireo
285. *Vireo gilvus* (Vieillot) warbling vireo
286. *Vireo griseus* (Boddaert) white-eyed vireo
287. *Vireo huttoni* (Cassin) Hurron's vireo
288. *Vireo olivaceus* (Linnaeus) red-eyed vireo
289. *Vireo solitarius* (Wilson) solitary vireo
290. *Vireo vicinior* (Coues) gray vireo

Family Parulidae

291. *Dendroica auduboni* (Townsend) Audubon's warbler
292. *Dendroica caerulescens* (Gmelin) black-throated blue warbler
293. *Dendroica coronata* (Linnaeus) myrtle warbler
294. *Dendroica graciae* (Baird) Grace's warbler
295. *Dendroica magnolia* (Wilson) magnolia warbler
296. *Dendroica nigrescens* (Townsend) black-throated gray warbler
297. *Dendroica occidentalis* (Townsend) hermit warbler
298. *Dendroica pennsylvanica* (Linnaeus) chestnut-sided warbler
299. *Dendroica petechia* (Linnaeus) yellow warbler
300. *Dendroica striata* (Forster) blackpoll warbler
301. *Dendroica townsendi* (Townsend) Townsend's warbler
302. *Geothlypis trichas* (Linnaeus) yellowthroat
303. *Helmitheros vermivorus* (Gmelin) worm-eating warbler

304. Icteria virens (Linnaeus) yellow-breasted chat
305. Mniotilta varia (Linnaeus) black and white warbler
306. Oporonis agilis (Wilson) Connecticut warbler
307. Oporonis tolmiei (Townsend) MacGillivray's warbler
308. Parula americana (Linnaeus) parula warbler
309. Prontonotaria citrea (Boddaert) prothonotary warbler
310. Seiurus aurocapillus (Linnaeus) ovenbird
311. Seiurus noveboracensis (Gmelin) northern waterthrush
312. Setophaga picta (Swainson) painted redstart
313. Setophaga ruticilla (Linnaeus) american redstart
314. Vermivora celata (Say) orange-crowned warbler
315. Vermivora luciae (Cooper) Lucy's warbler
316. Vermivora peregrina (Wilson) Tennessee warbler
317. Vermivora ruficapilla (Wilson) Nashville warbler
318. Vermivora virginiae (Baird) Virginia's warbler
319. Wilsoni citrina (Boddaert) hooded warbler
320. Wilsonia pusilla (Wilson) Wilson's warbler

Family Pleceidae

321. Passer domesticus (Linnaeus) house sparrow

Family Icteridae

322. Agelaius phoeniceus (Linnaeus) redwinged blackbird
323. Agelaius tricolor (Audubon) tricolored blackbird
324. Dolichonyx oryzivorus (Linnaeus) bobolink
325. Euphagus carolinus (Muller) rusty blackbird
326. Euphagus cyanocephalus (Wagler) Brewer's blackbird
327. Icterus bullockii (Swainson) Bullock's oriole

328. Icterus cucullatus (Swainson) hooded oriole
329. Icterus parisorum (Bonaparte) Scott's oriole
330. Icterus spurius (Linnaeus) orchard oriole
331. Molothrus ater (Boddaert) brown-headed cowbird
332. Quiscalus quiscula (Linnaeus) common grackle
333. Sturnella neglecta (Audubon) western meadowlark
334. Xanthocephalus xanthocephalus (Bonaparte) yellow-headed blackbird

Family Thraupidae

335. Piranga flava (Vieillot) hepatic tanager
336. Piranga ludoviciana (Wilson) western tanager
337. Piranga olivacea (Gmelin) scarlet tanager
338. Piranga rubra (Linnaeus) summer tanager

Family Fringillidae

339. Acanthis flammea (Linnaeus) common redpoll
340. Aimophila cassinii (Woodhouse) Cassin's sparrow
341. Ammodramus savannarum (Gmelin) grasshopper sparrow
342. Amphispiza belli (Cassin) sage sparrow
343. Amphispiza bilineata (Cassin) black-throated sparrow
344. Calamospiza melanocorys (Stejneger) lark bunting
345. Calcarius lapponicus (Linnaeus) lapland longspur
346. Calcarius ornatus (Townsend) chestnut-collared longspur

347. Carpodacus cassinii (Baird) Cassin's finch
348. Carpodacus mexicanus (Muller) house finch
349. Carpodacus purpureus (Gmelin) purple finch
350. Chlorura chlorura (Audubon) green-tailed towhee
351. Chondestes grammacus (Say) lark sparrow
352. Guiraca casrulea (Linnaeus) blue grosbeak
353. Hesperiphona vespertina (Cooper) evening grosbeak
354. Junco caniceps (Woodhouse) gray-headed junco
355. Junco hyemalis (Linnaeus) slate-colored junco
356. Junco oreganus (Townsend) Oregon junco
357. Leucosticte atrata (Ridgway) black rosy finch
358. Leucosticte tephrocotis (Swainson) gray-crowned rosy finch
359. Loxia curvirostra (Linnaeus) red crossbill
360. Melospiza georgiana (Latham) swamp sparrow
361. Melospiza lincolnii (Audubon) Lincoln's sparrow
362. Melospiza melodia (Wilson) song sparrow
363. Passerculus sandwichensis (Gmelin) grasshopper sparrow
364. Passerella iliaca (Merrem) fox sparrow
365. Passerherbulus caudactus (Latham) LeConte's sparrow
366. Passerina amoena (Say) lazuli bunting
367. Passerina cyanea (Linnaeus) indigo bunting
368. Pheucticus ludovicianus (Linnaeus) rose-breasted grosbeak
369. Pheucticus melanocephalus (Swainson) black-headed grosbeak
370. Pinicola enucleator (Linnaeus) pine grosbeak
371. Pipilo aberti (Baird) Abert's towhee
372. Pipilo erythrophthalmus (Linnaeus) rufous-sided towhee
373. Plectrophenax nivalis (Linnaeus) snow bunting
374. Pooecetes gramineus (Gmelin) vesper sparrow
375. Rhyncholphanes mccownii (Lawrence) McCown's longspur
376. Richmondena cardinalis (Linnaeus) cardinal
377. Spinus pinus (Wilson) pine siskin
378. Spinus lawrencei (Cassin) Lawrence's goldfinch
379. Spinus psaltria (Say) lesser goldfinch
380. Spinus tristis (Linnaeus) american goldfinch
381. Spiza americana (Gmelin) dickcissel
382. Spizella arborea (Wilson) tree sparrow
383. Spizella atrogularis (Cabanis) black-chinned sparrow
384. Spizella breweri (Cassin) Brewer's sparrow
385. Spizella pallida (Swainson) clay-colored sparrow
386. Spizella passerina (Bechstein) chipping sparrow
387. Zonotrichia albicollis (Gmelin) white-throated sparrow
388. Zonotrichia atricapilla (Gmelin) golden-crowned sparrow
389. Zonotrichia leucophrys (Forster) white-crowned sparrow
390. Zonotrichia querula (Nuttall) Harris' sparrow

A List of Mammals of the Intermountain Region of the Forest Service

Order INSECTIVORA

Family Soricidae -- shrews

1. *Notiosorex crawfordi* Crawford shrew
2. *Sorex cinereus* masked shrew
3. *Sorex merriani* Merriam shrew
4. *Sorex nanus* dwarf shrew
5. *Sorex obscurus* dusky shrew
6. *Sorex palustris* northern water shrew
7. *Sorex tenellus* dwarf shrew
8. *Sorex trowbridgii* Trowbridge shrew
9. *Sorex vagrans* vagrant shrew

Family Talpidae -- moles

10. *Scapanus latimanus* broad-footed mole, California mole

Order CHIROPTERA

Family Phyllostomidae -- leafnose bats

11. *Macrotus californicus* leafnose bat

Family vespertinlionidae -- plainnose bats

12. *Antrozous pallidus* pallid bat
13. *Eptesicus fuscus* big brown bat
14. *Euderma maculata* spotted bat
15. *Lasionycteris noctivagans* silver-haired bat
16. *Lasiurus borealis* red bat
17. *Lasiurus cinereus* hoary bat
18. *Myotis californicus* California myotis
19. *Myotis evotis* long-eared myotis
20. *Myotis lucifugus* little brown myotis
21. *Myotis subulatus* small-footed myotis
22. *Myotis thysanodes* fringed myotis
23. *Myotis velifer* cave myotis
24. *Myotis volans* long-legged muotis
25. *Myotis yumanesis* Yuma myotis
26. *Pipistrellus helperus* western pipistrelle
27. *Plecotus phyllotis* Mexican big-eared bat
28. *Plecotus townsendi* western big-eared bat

Family Mollossidae -- freetail bats

29. *Tadarida molossa* big freetail bat
30. *Tadarida brasiliensis* Mexican freetail bat

Order CARNIVORA

Family Ursidae -- bears

31. *Ursus americanus* black bear
32. *Ursus arctos* grizzly bear

Family Procyonidae -- racoons

33. *Procyon lotor* racoon

Family Bassariscidae -- ringtails

34. *Bassariscus astutus* ringtail cat

Family Mustelidae -- weasels and skunks

35. *Lutra canadensis* river otter
36. *Martes americana* marten
37. *Martes pennanti* fisher
38. *Mephitis mephitis* striped skunk
39. *Mustela erminea* shorttail weasel (ermine)
40. *Mustela frenata* longtail weasel
41. *Mustela nigripes* black-footed ferret
42. *Mustela vison* mink
43. *Spilogale putorius* spotted skunk
44. *Taxidea taxus* badger

Family Canidae -- coyotes and foxes

45. *Canis latrans* coyote
46. *Urocyon cinereoargenteus* gray fox
47. *Vulpes vulpes* red fox
48. *Vulpes macrotis* kit fox
49. *Vulpes velox* swift fox

Family Felidae - cats

50. *Felis concolor* mountain lion, cougar, puma
51. *Lynx canadensis* Canada lynx
52. *Lynx rufus* bobcat

Order RODENTIA

Family Sciuridae - squirrels

53. *Ammonspermophilus leucurus* whitetail antelope ground squirrel
54. *Eutamias amoenus* yellow pine chipmunk
55. *Eutamias dorsalis* cliff chipmunk
56. *Eutamias minimus* least chipmunk
57. *Eutamias palmeri* Palmer chipmunk
58. *Eutamias panamintinus* panamint chipmunk
59. *Eutamias quadrivittatus* Colorado chipmunk
60. *Eutamias quadrimaculatus* long-eared chipmunk

61. *Eutamias townsendi* Townsend chipmunk
62. *Eutamias umbrinus* Utah chipmunk
63. *Cynomys gunnisoni* whitetail prairie dog
64. *Cynomys parvidens* Utah prairie dog
65. *Glaucomys sabrinus* northern flying squirrel
66. *Marmota caligata* hoary marmot
67. *Marmota flaviventris* yellowbelly marmot
68. *Marmota monax* woodchuck
69. *Sciurus aberti* Abert squirrel, tassel-eared squirrel
70. *Spermophilus armatus* Uinta ground squirrel
71. *Spermophilus beecheyi* California ground squirrel
72. *Spermophilus beldingi* Belding ground squirrel
73. *Spermophilus brunneus* Idaho ground squirrel
74. *Spermophilus columbianus* Columbian ground squirrel
75. *Spermophilus lateralis* golden-mantled ground squirrel
76. *Spermophilus richardsonii* Richardson ground squirrel
77. *Spermophilus spilosoma* spotted ground squirrel
78. *Spermophilus tereticaudus* roundtail ground squirrel
79. *Spermophilus townsendii* Townsend ground squirrel
80. *Spermophilus tridecemlineatus* 13-lined ground squirrel
81. *Spermophilus variegatus* rock squirrel
82. *Tamiasciurus hudsonicus* red squirrel

Family Geomidae - pocket gophers

83. *Thomomys bottae* valley pocket gopher
84. *Thomomys monticola* Sierra pocket gopher
85. *Thomomys talpoides* northern pocket gopher
86. *Thomomys townsendii* Townsend pocket gopher

Family Heteromyidae - pocket mice, kangaroo mice, kangaroo rats

87. *Dipodomys deserti* desert kangaroo rat
88. *Dipodomys merriami* Merriam kangaroo rat
89. *Dipodomys microps* Great Basin kangaroo rat, chisel-toothed kangaroo rat
90. *Dipodomys ordii* Ord kangaroo rat
91. *Dipodomys panamintinus* panamint kangaroo rat
92. *Microdipodops pallidus* pale kangaroo rat
93. *Microdipodops megacephalus* dark kangaroo rat
94. *Perognathus apache* Apache pocket mouse
95. *Perognathus flavus* silky pocket mouse
96. *Perognathus formosus* longtail pocket mouse
97. *Perognathus intermedius* rock pocket mouse
98. *Perognathus longimembris* little pocket mouse
99. *Perognathus parvus* Great Basin pocket mouse
100. *Perognathus penicillatus* desert pocket mouse
101. *Perognathus spinatus* spiny pocket mouse

Family Castoridae - beaver

102. *Castor canadensis* beaver

Family Cricetidae - mice, rats, voles

103. Clethrionomys gapperi boreal redback vole, Gapper's redback mouse
104. Lagurus curtatus sagebrush vole
105. Microtus longicaudus longtail vole
106. Microtus mexicanus Mexican vole
107. Microtus montanus mountain vole
108. Microtus pennsylvanicus meadow vole
109. Microtus richardsoni Richardson vole
110. Neotoma albigula whitethroat woodrat
111. Neotoma cinerea bushytail woodrat
112. Neotoma lepida Mexican woodrat
113. Ondatra zibethicus muskrat
114. Onychomys leucogaster northern grasshopper mouse
115. Onychomys torridus southern grasshopper mouse
116. Peromyscus boylii brush mouse
117. Peromyscus crinitus canyon mouse
118. Peromyscus difficilis rock mouse
119. Peromyscus eremicus cactus mouse
120. Peromyscus maniculatus deer mouse
121. Peromyscus truei pinon mouse
122. Phenocomys intermedius mountain (heather) vole
123. Reithrodontomys megalotis western harvest mouse
124. Sigmodon hispidus hispid cotton rat

Family Muridae - old world rats and mice

125. Mus musculus house mouse
126. Rattus norvegicus Norway rats
127. Rattus rattus

Family Zapodidae - jumping mice

128. Zapus princeps western jumping mouse

Family Erethizontidae - porcupine

129. Erethizon dorsatum porcupine

Family Capromyidae - nutria

130. Myocaster coypus nutria

Order LAGOMORPHA

Family Ochotonidae - pika

131. Ochontona pinceps pika

Family Leporidae - hares and rabbits

132. Lepus americanus snowshoe hare
133. Lepus californicus blacktail jackrabbit
134. Lepus townsendi whitetail jackrabbit
135. Sylvilagus audubonii desert cottontail
136. Sylvilagus idahoensis pygmy rabbit
137. Sylvilagus nuttallii mountain cottontail

Order ARTIODACTYLA

Family Cervidae - deer

138. *Alces alces* moose
139. *Cervus canadensis* elk (wapiti)
140. *Odocoileus hemionus* mule deer
141. *Odocoileus virginianus* whitetail deer

Family Antilocapridae - pronghorn

142. *Antilocapra americana* pronghorn (antelope)

Family Bovidae - bison, goats, sheep

143. *Bison bison* bison (buffalo)
144. *Oreamnos americanus* mountain goat
145. *Ovis canadensis* bighorn sheep

Order PERISSODACTYLA

Family Equidae

146. *Equus caballus* wild horse

A List of the Amphibians of the Intermountain Region of the Forest Service

Order CAUDATA---salamanders

Family Ambystomidae

1. *Ambystoma macrodactylum* long-toed salamander
2. *Ambystoma tigrinum* tiger salamander

Order SALIENTIA---frogs and toads

Family Pelobatidae

3. *Scaphiopus hammondi* western spadefoot
4. *Scaphiopus intermontanus* great basin spadefoot

Family Bufonidae

5. *Bufo boreuas* western toad
6. *Bufo cognatus* great plains toad
7. *Bufo microscaphus* southwestern toad
8. *Bufo punctatus* red-spotted toad
9. *Bufo woodhousei* woodhouse's toad

Family Hylidae

10. *Hyla arenicolor* canyon treefrog
11. *Hyla regalla* Pacific treefrog
12. *Pseudacris triseriata maculata* boreal chorus frog

Family Ranidae

13. *Rana aurora* red-legged frog
14. *Rana catesbeina* bullfrog
15. *Rana muscosa* mountain yellow-legged frog
16. *Rana pipiens* leopard frog
17. *Rana pretiosa* spotted frog

A List of the Reptiles of the Intermountain Region of the Forest Service

Order TESTUDINATA---turtles

Family Testudinidae

1. *Clemmys marmorata* western pond turtle
2. *Gopherus agassizi* desert tortoise
3. *Trionyx spinferus* spiny softshell

Order SQUAMATA---lizards and snakes

Family Gekkonidae

4. *Coleonyx variegatus* banded gecko

Family Iguanidae

5. *Callisaurus draconoides* zebra-tailed lizard
6. *Crotaphytus collaris* collared lizard
7. *Crotaphytus wislizeni* leopard lizard
8. *Dipsosaurus dorsalis* desert lizard
9. *Holbrookis maculata* lesser earless lizard
10. *Phrynosoma douglassi* short-horned lizard
11. *Phrynosoma platyrhinos* desert horned lizard
12. *Sceloporus graciosus* sagebrush lizard
13. *Sceloporus magister* desert spiny lizard
14. *Sauromalus obesus* chuckwalla
15. *Sceloporus occidentalis* western fence lizard
16. *Sceloporus undalutus* eastern fence lizard
17. *Urosaurus graciosus* long-tailed brush lizard
18. *Urosaurus ornatus* tree lizard
19. *Uta ornata* tree lizard
20. *Uta stansburiana* side-blotched lizard

Family Xantusidae

21. *Xantusia vigilis* desert night lizard

Family Scincidae

22. *Eumeces gilberti* Gilbert's skink
23. *Eumeces skiltonianus* western skink

Family Teidae

24. *Cnemidophorus sacki* spotted whiptail
25. *Cnemidophorus tigris* western whiptail
26. *Cnemidophorus velox* plateau whiptail

Family Helodermatidae

27. *Heloderma suspectum* gila monster

Family Leptotyphlopidae

28. *Leptotyphlops humilus* western blind snake

Family Boidae

29. *Charina bottae* rubber boa

Family Colubridae

30. *Arizona elegans* glossy snake
31. *Chionactus occipitalis* western shovel-nosed snake
32. *Doluber constrictor* racer
33. *Diadophis punctatus* ringneck snake
34. *Diadophis regalis* regal ringnecked snake
35. *Elaphe guttata* corn snake
36. *Hypsiglena torquata* night snake
37. *Lampropeltis getulus* common kingsnake
38. *Lampropeltis pyromelana* Sonora mountain kingsnake
39. *Lampropeltis triangulum* milk snake
40. *Masticophis flagellum* coachwhip
41. *Masticophis taeniatus* striped whipsnake
42. *Opheodrys vernalis* smooth green snake
43. *Phyllorhynchus decurtatus* spotted leaf-nosed snake
44. *Pituophis melanoleucas* gopher snake
45. *Rhinocheilus lecontei* long-nosed snake
46. *Salvadora hexalepis* western patch-nosed snake
47. *Sonora semiannulata* western ground snake
48. *Tantilla planiceps* western black-headed snake
49. *Tantilla planiceps utahensis* Utah black-headed snake
50. *Thamnophis couchi* western aquatic garter snake
51. *Thamnophis elegans* western terrestrial garter snake
52. *Trimorphodon lambda* Sonora lyre snake
53. *Thamnophis sirtalis* common garter snake

Family Viperidae

54. *Crotalus atrox* western diamondback rattlesnake
55. *Crotalus cerastes* sidewinder
56. *Crotalus mitchelli* speckled rattlesnake
57. *Crotalus scutulatus* mojave rattlesnake
58. *Crotalus viridis* western rattlesnake

A List of Fishes of the Intermountain Region of the Forest Service

Order PETROMYZONTIFORMES

Family Petromyzontidae -- lamprey

1. *Entosphenus tridentatus* (Gairdner) Pacific lamprey

Order ACIPENSERIFORMES

Family Acipenseridae -- sturgeons

2. *Acipenser transmontanus* Richardson white sturgeon

Order CLUPEIFORMES

Family Clupeidae -- herring, shad

3. *Alosa sapidissima* (Wilson) American shad
4. *Dorosoma petenense* (Gunther) threadfin shad

Order SALMONIFORMES

Family Salmonidae -- trout, salmon

5. *Oncorhynchus keta* (Walbaum) chum salmon
6. *Oncorhynchus nerka* (Walbaum) sockeye salmon
7. *Oncorhynchus nerka kennerlyi* (Walbaum) kokanee
8. *Oncorhynchus tshawytscha* (Walbaum) chinook salmon
9. *Salmo aquabonita* (Jordan) golden trout
10. *Salmo clarki* (Richardson) cutthroat trout
11. *Salmo clarki pleuriticus* (Cope) Colorado River cutthroat
12. *Salmo clarki utah* (Suckley) Utah cutthroat
13. *Salmo clarki lewisi* (Girard) Yellowstone cutthroat
14. *Salmo clarki henshawi* (Gill and Jordan) Lahontan cutthroat
15. *Salmo gairdneri* (Richardson) rainbow trout
16. *Salmo gairdneri irideus* (Gibbons) southcoat rainbow trout
17. *Salmo gairdneri kamloops* (Jordan) Kamloops rainbow trout
18. *Salmo gairdneri regalis* (Snyder) Tahoe rainbow trout
19. *Salmo gairdneri smaragdus* (Snyder) Pyramid rainbow trout
20. *Salmo trutta* (Linnaeus) brown trout
21. *Salvelinus alpinus* (Linnaeus) arctic char
22. *Salvelinus fontinalis* (Mitchill) brook trout
23. *Salvelinus malma* (Walbaum) Dolly Varden
24. *Salvelinus namaycush* (Walbaum) lake trout
25. *Thymallus arcticus* (Pallas) Arctic grayling

Family Coregonidae -- whitefish

26. *Coregonus clupeaformis* (Mitchill) Lake whitefish
27. *Prosopium abyssicola* (Snyder) Bear Lake whitefish
28. *Prosopium gemmiferum* (Snyder) Bonneville cisco
29. *Prosopium spilonotus* (Snyder) Bonneville whitefish
30. *Prosopium williamsoni* (Girard) mountain whitefish

Family Osmeridae --smelt

31. *Osmerus mordax* (Mitchill) rainbow smelt

Family Exocidae -- pike

32. *Esox lucius* (Linnaeus) northern pike

Order CYPRINIFORMES

Family Cyprinidae -- minnow and carp

33. *Acrocheilus alutaceus* (Agassiz and Pickering) chisel mouth
34. *Carassius auratus* (Linnaeus) goldfish
35. *Couesius plumbeus* (Agassiz) lake chub
36. *Cyprinus carpio* (Linnaeus) carp
37. *Eremichthys acros* (Hubbs and Miller) desert dace
38. *Gila atraria* (Girard) Utah chub
39. *Gila bicolor* (Girard) tui chub
40. *Gila bicolor obesus* (Girard) Lahontan tui chub
41. *Gila copei* (Jordan and Gilbert) leatherside chub
42. *Gila cypha* (Miller) humpback chub
43. *Gila elegans* (Baird and Girard) bonytail
44. *Gila robusta* (Baird and Girard) roundtail chub
45. *Iotichthys phlegethontis* (Cope) least chub
46. *Lepidomeda albivallis* (Miller and Hubbs) White River spinedace
47. *Lepidomeda altivelis* (Miller and Hubbs) Pahranagat spinedace
48. *Lepidomeda mollispinis* (Miller and Hubbs) virgin spindace
49. *Lepidomeda mollispinis pratensis* (Miller and Hubbs) Big Spring spinedace
50. *Moapa coriacea* (Hubbs and Miller) Moapa dace
51. *Mylocheilus caurinus* (Richardson) peamouth
52. *Notemigonus crysoleucas* (Mitchill) golden shiner
53. *Notropis lutrensis* (Baird and Girard) red shiner
54. *Orthodon microlepidotus* (Ayres) Sacramento blackfish
55. *Pimephales promelas* (Rafinesque) fathead minnow
56. *Pimephales vigilax* (Baird and Girard) bullhead minnow
57. *Plagopterus argentissimus* (Cope) woundfin
58. *Ptychocheilus lucius* (Girard) Colorado squawfish
59. *Ptychocheilus oregonensis* (Richardson) northern squawfish
60. *Rhinichthys cataractae* (Valenciennes) longnose dace
61. *Rhinichthys osculus* (Girard) speckled dace
62. *Rhinichthys osculus carringtoni* (Cope) Snake River speckled dace
63. *Rhinichthys osculus nevadensis* (Gilbert) Amargara speckled dace
64. *Rhinichthys osculus robustus* (Rutter) Lahontan speckled dace
65. *Rhinichthys osculus velifer* (Gilbert) White River speckled dace

66. *Richardsonius balteatus* (Richardson) redside shiner
67. *Richardsonius balteatus hydrophlox* (Cope) Bonneville redside shiner
68. *Richardsonius egregius* (Girard) Lahontan redside
69. *Tinca tinca* (Linnaeus) tench

Family Catostomidae -- sucker

70. *Catostomus ardens* (Jordan and Gilbert) Utah sucker
71. *Catostomus catostomus* (Forster) longnose sucker
72. *Catostomus clarki* (Baird and Girard) desert sucker
73. *Catostomus columbianus* (Eigenmann and Eigenmann) bridgelip sucker
74. *Catostomus discobolus* (Cope) bluehead sucker
75. *Catostomus fecundus* (Cope and Yarrow) webug sucker
76. *Catostomus latipinnis* (Baird and Girard) flannelmouth sucker
77. *Catostomus macrocheilus* (Girard) largescale sucker
78. *Catostomus platyrhynchus* (Cope) mountain sucker
79. *Catostomus tahoensis* (Gill and Jordan) Tahoe sucker
80. *Chasmistes cujus* (Cope) cui-ui
81. *Chasmistes liorus* (Jordan) June sucker
82. *Xyrauchen texanus* (Abbott) humpback sucker

Family Ictaluridae -- catfish

83. *Ictalurus catus* (Linnaeus) white catfish
84. *Ictalurus melas* (Rafinesque) black bullhead
85. *Ictalurus nebulosus* (Lesuer) brown bullhead
86. *Ictalurus punctatus* (Rafinesque) channel catfish
87. *Noturus gyrinus* (Mitchill) tadpole madtom
88. *Pylodictus olivarus* (Rafinesque) flathead catfish

Order GADIFORMES

Family Gadidae -- codfish

89. *Lota lota* (Linnaeus) burbot

Order CYPRINODONTIFORMES

Family Cyprinodontidae -- killifish

90. *Crenichthys baileyi* (Gilbert) White River killifish
91. *Crenichthys nevadae* (Hubbs) Railroad Valley killifish
92. *Cyprinodon diabolis* (Wales) Devils Hole pupfish
93. *Cyprinodon nevadensis* (Eigenmann and Eigenmann) Amargosa pupfish
94. *Cyprinodon nevadensis mionectes* (Miller) Big Springs Amargosa pupfish
95. *Cyprinodon nevadensis pectoralis* (Miller) Lovell Springs Amargosa pupfish
96. *Empetrichthys latos* (Miller) Pahrump killifish
97. *Empetrichthys latos concavus* (Miller) Raycraft Ranch Pahrump poolfish
98. *Empetrichthys latos latos* (Miller) Manse Ranch Pahrump poolfish
99. *Empetrichthys latos pahrump* (Miller) Pahrump Ranch Pahrump poolfish

100. *Empetrichthys merriami* (Gilbert) Ash Meadows killifish
101. *Fundulus zebrinus* (Jordan and Gilbert) Rio Grande killifish
102. *Lucania parua* (Baird) rainwater killifish

Family Poecilidae -- livebearers

103. *Gambusia affinis affinis* (Baird and Girard) western mosquitofish
104. *Poecilia latipinna* (Lesueur) sailfin molly
105. *Xiphophorus helleri* (Heckel) green swordtail
106. *Xiphophorus maculatus* (Gunther) southern platyfish

Order PERCIFORMES

Family Perichthydiae -- temperate bass

107. *Morone chrysops* (Rafinesque) white bass
108. *Morone saxatilis* (Walbaum) striped bass

Family Centrarchidae -- sunfish

109. *Archoplites interruptus* (Girard) Sacramento perch
110. *Lepomis cyanellus* (Rafinesque) green sunfish
111. *Leponis gibbosus* (Linnaeus) pumpkinseed
112. *Leponis gulosus* (Cuvier) warmouth
113. *Lepomis macrochirus* (Rafinesque) bluegill
114. *Lepomis microlophus* (Gunther) redear sunfish
115. *Micropterus dolomieui* (Lacepede) smallmouth bass
116. *Micropterus salmoides* (Lacepede) largemouth bass
117. *Pomoxis annularis* (Rafinesque) white crappie
118. *Pomixis nigromaculatus* (Lesueur) black crappie

Family Percidae -- perch

119. *Perca flavescens* (Mitchill) yellow perch
120. *Stizostedion vitreum vitreum* (Mitchill) walleye

Family Cottidae -- sculpin

121. *Cottus bairdi* (Girard) mottled sculpin
122. *Cottus bairdi semiscaber* (Cope) Bonneville Baird sculpin
123. *Cottus beldingi* (Eigenmann and Eigenmann) Piute sculpin
124. *Cottus cognatus* (Richardson) slimy sculpin
125. *Cottus confusus* (Bailey and Bond) shorthead sculpin
126. *Cottus extensus* (Bailey and Bond) Bear Lake sculpin

NATIONAL FOREST SYSTEM LAND
AND
RESOURCE MANAGEMENT PLANNING

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NATIONAL FOREST SYSTEM LAND AND RESOURCE MANAGEMENT PLANNING

219.1 Purpose.

(a) The resulting plans will provide for multiple use and sustained yield of products and services from the National Forest System.

(b) Plans guide all natural resource management activities and establish mangement standards and guidelines for the National Forest System.

All levels of planning will be based on the following principles:

(1) Consideration of the relative values of all renewable resources.

(2) Establishment of goals and objectives for the sustained yield of products and services resulting from multiple-use management without impairment of the productivity of the land;

(3) Protection and, where appropriate, improvement of the quality of renewable resources;

(6) Protection of all forest and rangeland resources from depredations by the forest pests, using ecologically compatible means;

(8) A systematic, interdisciplinary approach to ensure coordination and integration of planning activities for multiple-use management;

219.3 Definitions.

(e) "Diversity": The number of different plant an animal species and each species' abundance, and the distribution and abundance of different natural plant and animal communities within the area covered by a land and resource management plan.

219.4 Planning levels.

(a) The planning process requires a continuous flow in information and management direction among the three Forest Service administrative levels: national, regional, and designated forest planning area.

219.5 Planning Process.

(c) Generally, criteria will be based on:

(1) Laws, executive orders, regulations, and Forest Service Manual policy;

(3) Recommendations and assumptions developed from public issues, management concerns, and resource use and development opportunities;

(4) The plans and programs of other Federal agencies, State and local governments and Indian tribes;

(5) Ecological, technical and economic factors;

(7) The resource management standards and guidelines in 219.3.

(d) Inventory data and information collection. Each responsible Forest Service official shall obtain and keep current inventory data appropriate for planning and managing the resources under his administrative responsibility, and shall assure that the interdisciplinary team has access to the best available data, which may require that special inventories or studies be prepared.

(f)(1) Initial analysis will include alternatives representative of the range of possible outputs of resources available at each of several expenditure levels.

(g) Estimated effects of alternatives. The interdisciplinary team shall estimate and display the physical, biological, economic, and social effects of implementing each alternative.

(g)(5)(v)(7) Determine effects on prime farmlands, wetlands and flood plains.

(h) Evaluation of alternatives. The interdisciplinary team will evaluate the significant physical, biological, economic and social effects of each management alternative according to the planning decision criteria.

219.6 Interdisciplinary Approach.

(a) A team representing several disciplines shall be used at each level of planning. The purpose of such a team is to coordinate and integrate planning activities. Through interactions among its members, the team will integrate knowledge of the physical, biological, economic and social sciences, and design arts into the planning process.

(b) The team shall be composed of Forest Service personnel who collectively represent specialized areas of technical knowledge about natural resource management applicable to the area being planned.

(c) Each team member shall, as a minimum, either have successfully completed a course of study in an accredited college or university leading to a bachelor's or degree in one or more specialized areas of assignment or have recognized expertise and experience in professional investigative, scientific, or other responsible work in specialities which members represent.

219.8 Coordination of Public Planning Efforts.

(a) Efficient management of the resources of the National Forest System benefits from planning that is thoroughly coordinated among all levels of government, including other Federal agencies, State and local governments, and Indian tribes.

(b) The responsible Forest Service official, through the interdisciplinary team, shall coordinate Forest Service planning with land and resource management planning of other affected government entities and Indian tribes to ensure that planning includes:

(1) Recognition of the objectives of other Federal, State and local governments, and owners of intermingled and adjacent private lands, as expressed in their plans and policies.

(2) An assessment of the interrelated impacts of these plans and policies.

(4) Where conflicts are identified, consideration of alternatives for their resolution.

(f) The responsible Forest Service official shall conduct, during the planning process, an appraisal of the planning and land use policies of other Federal agencies, State and local governments and Indian tribes. The appraisal intensity will be appropriate to the planning level and requirements of the envisioned plan. This appraisal will include, but not be limited to, plans affecting renewable natural resources and minerals, recreation, community and economic development, land use, transportation, wildlife, water and air pollution control, cultural resources, and energy.

(h) The responsible Forest Service official, in developing the forest plan, shall seek input from other Federal, State and local governments, universities, and private research organizations in resolving management concerns in the planning process and in identifying areas where additional research is needed.

219.10 Criteria for Regional Planning Actions.

(b) In addition to public issues and management concerns identified through public participation and coordination, each regional plan shall address issues and concerns referred from national or forest planning. Some management concerns that should be considered in regional and in forest planning are the needs to:

(6) Enhance water quality and quantity, soil productivity, and restore watershed conditions;

(9) Maintain or improve fish and wildlife habitats;

(10) Improve critical and essential habitats of threatened or endangered plant and animal species.

(16) Identify typical examples of important botanic, aquatic, and geologic types, and protect them through establishment of research natural areas.

(f) Data for regional planning will be based principally on information from forest planning, with other data provided by the States, other Federal agencies, and private sources.

219.12 Criteria for Forest Planning Actions.

(a) The criteria in paragraphs (b) through (m) of this section provide the minimum requirements to be considered if appropriate for the forest being planned. Additional planning criteria may be found in the guidelines for managing specific renewable resources set forth in the Forest Service Manual.

(b)(1) During the analysis of the management situation, data on all National Forest System lands will be reviewed and those lands meet all of the requirements of paragraphs (b)(1)(i) through (iv) of this section will be tentatively identified as available, capable and suitable for timber production.

(b)(1)(iii) Technology is available that will ensure timber production from the land without irreversible resource damage to soils, productivity, and watershed conditions, or without significant adverse impact on threatened or endangered species.

(b)(2) Lands that have been tentatively identified as available, capable, and suitable for timber production in paragraph (b)(1) of this section will be further reviewed and assessed prior to the formulation of alternatives to determine their potential economic efficiency in commercial timber production.

(b)(2)(ii) Direct costs include the anticipated investments, maintenance, operating, and management and planning costs attributable to timber production activities, and any costs that may be reasonably attributed to mitigation measures necessitated by the impacts of timber production.

(b)(3) During the formulation of each alternative, combinations of resource activities will be defined to meet management objectives.

(d)(1)(ii) The determinations of the long-term sustained-yield capacity, base harvest schedules, and departure alternatives to the base harvest schedule will be made on the basis of the guidelines which follows:

(d)(3)(ii)(D) For all harvest schedules, achieves a forest structure by the conclusion of the scheduling period that will enable perpetual timber harvest thereafter all the long-term sustained-yield capacity, consistent with the long-range multiple-use objectives of the alternative.

(e) When revising the forest plan, roadless areas within an adjacent to the forest, will be evaluated and considered for recommendation as potential wilderness areas, as provided in paragraphs (e)(1) and (2) of this section.

(e)(2) Each area designated for evaluation under paragraph (e)(1) of this section will be evaluated in terms of current national guidelines or, in their absence, by criteria developed by the interdisciplinary team with public participation. In the latter case, the criteria will include as a minimum:

(v) The anticipated long-term changes in plant and animal species diversity, including the diversity of natural plant and animal communities of the forest planning area and the effects of such changes on the values for which wilderness areas were created.

(f)(1) Provide for limiting and distributing visitor use of specific portions in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and that do not impair the values for which wilderness areas were created; and

(g) Fish and wildlife habitats will be managed to maintain viable populations of all existing native vertebrate species in the planning area and to maintain and improve habitat of management indicator species. To meet this goal, management planning for the fish and wildlife resource will meet the requirements set forth in paragraph (g)(1) through (7) of this section and the guidelines in Chapter 2620, Forest Service Manual.

(1) The desired future condition of fish and wildlife, where technically possible, will be stated in terms both of animal population trends and of amount and quality of habitat.

(2) Management indicator species will be identified for planning, and the reasons for their selection will be given. The species considered shall include at least: Endangered and threatened plant and animal species identified on State and Federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped, and additional plant or animal species selected because their population changes are believed to indicate effects of management activities on other species of a major biological community or on water quality. On the basis of available scientific information, the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species will be estimated. Where appropriate, measures to mitigate adverse effects will be prescribed.

(3) Biologists from State fish and wildlife agencies and other Federal agencies shall be consulted by the interdisciplinary team in order to coordinate planning with State plans for fish and wildlife.

(4) Access and dispersal problems of hunting, fishing, and other visitor uses will be considered.

(5) The effects of pest and fire management on fish and wildlife populations will be considered.

(6) Population trends of the management indicator species shall be monitored and relationships to habitat changes determined. This monitoring shall be done in cooperation with State fish and wildlife agencies, to the extent practicable.

(7) Critical habitat for threatened and endangered species will be determined, and measures shall be prescribed to prevent the destruction or adverse modification of such habitat. Objectives will be determined for threatened and endangered species through appropriate conservation measures, including the designation of special areas to meet the protection and management needs of such species.

(h) Identify lands suitable for grazing and browsing in accordance with criteria in paragraphs (h)(1) through (3) of this section and guidelines established in Forest Service Manual 2210.

(l) The procedures used and data obtained will include, but not be limited to, the following:

(i) Range condition and trend studies

(iii) An estimate of the capability of the rangelands to produce suitable food and cover for the management indicator species of wildlife; and

(2) In the analysis of management situation, assess the capability of the planning area to produce forage without permanent impairment of the resources, considering the condition of the vegetation, statutory and administrative withdrawals, characteristics of soil and slope, and accessibility to grazing and browsing animals.

(3) Alternative range management practices will consider:

(iv) Possible conflicts or beneficial interactions among domestic, feral, and wild animal populations, and methods of regulating these;

(vi) A broad spectrum of dispersed and developed recreation opportunities in accord with identified needs and demands will be provided.

(l) Forest planning will identify:

(i) The physical and biological characteristics that make land suitable for recreation activities:

(ii) The recreational preferences of user groups; and

(iii) Recreation opportunities on the National Forest System lands.

(4) In formulation and analysis of alternatives as specified in 219.5 (f) and (g), interactions among recreation activities and other multiple uses shall be examined. This examination shall consider the impacts of the proposed recreation activities on other uses and values and the impacts of other uses and activities associated with them on recreation opportunities, activities, and quality of experience.

(7) Off-road vehicle use will be planned and implemented to minimize adverse effects on the land and resources, promote public safety, and minimize conflicts with other uses of the National Forest System lands.

(k) The water and soil management guidelines set forth in Chapter 2510, Forest Service Manual and paragraph (k)(1) through (6) of this section will be followed in planning the management of the water and soil resources.

(1) Current water uses, both consumptive and nonconsumptive, within the area of land covered by the forest plan, including instream flow requirements, will be determined.

(2) Existing impoundments, transmission facilities, wells, and other man-made developments on the area of land covered by the forest plan will be identified.

(6) Measures, as directed in applicable Executive Orders, to minimize risk of flood loss and to restore and preserve floodplain values, and to protect wetlands, will be adopted.

(m) Forest planning will provide for the establishment of Research Natural Areas (RNA's). Each plan will make provision for the identification of examples of important forest, shrubland, grassland, alpine, aquatic, and geologic types that have special or unique characteristics of scientific interest and importance and that are needed to complete the national network of RNA's. Biotic, aquatic, and geologic types needed for the network will be identified using a list provided by the Chief, Forest Service.

219.13 Management Standards and Guidelines.

(a) Management of National Forest System lands requires adherence to the planning principles stated in 219.1, specific management requirements to be met in accomplishing goals and objectives include, as a minimum, those in paragraphs (b) through (i) of this section.

(b) All management practices will:

(1) Conserve soil and water resources and not allow significantor permanent impairment of the productivity of the land;

(2) Minimize serious or long-lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces except as these are specifically accepted, as in Wilderness;

(3) Prevent or reduce serious, long-lasting hazards from pest organisms under the principles of integrated pest management;

(4) Protect streams, streambanks, shorelines, lakes, wetlands, and other bodies of water as provided under paragraphs (e) and (f) of this section;

(5) Provide for and maintain diversity of plant and animal communities to meet overall multiple-use objectives, including, where appropriate and to the degree practicable, management practices to preserve endemic and desirable naturalized plant and animal species similar to those existing in the planning area.

(6) Be monitored and evaluated as required in 219.5(k) to assure that practices perserve critical soil, watershed, fish, wildlife, recreation, and aesthetic values; maintain vegetative productivity; and reduce hazards from insects, disease, weed species, and fire;

(7) Prior to project implementation, the potential physical, biological, aesthetic, cultural, engineering, and economic impacts, will be assessed in addition to the consistency of the project with the multiple uses planned for the general area;

(8) Ensure that fish and wildlife habitats are managed to maintain viable populations of all existing native vertebrate species and to improve habitat of selected species, coordinated with appropriate State fish and wildlife agencies and monitored in cooperation with these agencies, to the extent practicable;

(9) Include measures for preventing the destruction or adverse modification of critical habitat for threatened and endangered species;

(c) Management practices that involve vegetation manipulation of tree cover for any purpose will:

(1) Be best suited to the multiple-use goals established for the area with all potential environmental, biological, cultural resource, aesthetic, engineering, and economic impacts, as stated in the regional and forest plans, being considered in this determination;

(2) Assure that lands can be adequately restocked within 5 years after final harvest as provided in paragraph (h)(3) of this section, except where permanent openings are created for wildlife permanent openings are created for wildlife habitat improvement, vistas, recreation uses and similar practices;

(6) Provide the desired effects on water quantity and quality, wildlife and fish habitat,

(7) Be practical in terms of transportation and harvesting requirements,

(d) When tree openings are created by the application of even-aged management, the provisions of paragraphs (d)(1) and (2) of this section apply.

(1) The blocks or strips cut shall be shaped and blended with the natural terrain to achive aesthetic and wildlife habitat objectives to the extent practicable. Openings will be located to achieve the desired combination of multiple objectives.

(2) Individual cut blocks, patches, or strips will conform to the maximum size limits for areas to be cut in one harvest operation established by the regional plan according to geographic areas and forest types. This limit may be less than, but shall not exceed,

40 acres for all other forest types except as provided in paragraphs (d)(2)(i) through (iii) of this section.

(i) Cut openings larger than those specified may be permitted where larger units will produce a more desirable combination of benefits. The following factors will be considered in determing size limits by geographic areas and forest types:

effects on wildlife and fish habitat;

(e) Special attention shall be given to land and vegetation for approximately 100 feet along both sides of all perennial streams, lakes, and other bodies of water. No management practices will be permitted which seriously and adversely affect water conditions or fish habitat. Such changes include increases in water temperatures or chemical composition, blockages or water course, or deposits of sediment that are likely to seriously and adversely affect water conditions or fish habitat. Topography, vegetation type, soil, climatic conditions, management objectives, and other factors will be considered in determining what management practices may be performed within these areas and the constraints to be placed upon their performance in order to assure protection of water condition, fish habitat or other multiple-use values.

(g) Diversity of plant and animal species and communities will be considered throughout the planning process. Inventories will include quantitative data making possible the evaluation of species and community diversity in terms of its prior and present condition, for each planning alternative, the interdisciplinary team will consider how diversity of species and communities will be preserved and enhanced by various mixes of resource outputs and uses, including the effects of proposed management practices on existing plant and animal species and communities in the planning area. The selected alternative will provide for plant and animal community diversity to meet the overall multiple-use objectives of the planning area. To the extent consistent with the requirement to provide for diversity, management practicies, where appropriate and to the extent practicable, will preserve and enhance species and communities diversity similar to that which would be expected in an unmanaged part of the planning area. Reductions in existing plant and animal community diversity will be made only where needed to meet overall multiple-use management objectives. Planned type conversions of the species will be justified by a detailed analysis showing biological, economic, and social consequences, and the relation of such conversions to the process of natural change.

(h) The management requirements in paragraph (h)(1) through (7) of this section apply to timber harvest and cultural treatments.

(h)(4) Cultural treatments such as thinning, weeding, and other partial cutting may be included in the forest plan where they are intended to increase the rate of growth of remaining trees, favor commercially valuable tree species, favor species or age classes which are most valuable for wildlife, or achieve other multiple-use objectives.

(6) Timber harvest cuts designed to regenerate an even-aged stand of timber will be carried out in a manner consistent with the protection of soil, watershed, fish and wildlife, recreation, and aesthetic resources, and the regeneration of the timber resource.

219.16 Transition Period.

(a) Until a forest planning area of the National Forest System land is managed under a forest plan developed pursuant to these regulations and approved by the regional forester, the land may continue to be managed under existing land use and resource plans.

PUBLIC LAW 94-588

Public Law 94-588
94th Congress

An Act

To amend the Forest and Rangeland Renewable Resources Planning Act of 1974, and for other purposes.

Oct. 22, 1976
[S. 3091]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "National Forest Management Act of 1976".

National Forest Management Act of 1976.
16 USC 1600 note.

FINDINGS

SEC. 2. The Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476; 16 U.S.C. 1601–1610) is amended by redesignating sections 2 through 11 as sections 3 through 12, respectively; and by adding a new section 2 as follows:

"SEC. 2. FINDINGS.—The Congress finds that—

16 USC 1600.

"(1) the management of the Nation's renewable resources is highly complex and the uses, demand for, and supply of the various resources are subject to change over time;

"(2) the public interest is served by the Forest Service, Department of Agriculture, in cooperation with other agencies, assessing the Nation's renewable resources, and developing and preparing a national renewable resource program, which is periodically reviewed and updated;

"(3) to serve the national interest, the renewable resource program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources from the Nation's public and private forests and rangelands, through analysis of environmental and economic impacts, coordination of multiple use and sustained yield opportunities as provided in the Multiple-Use Sustained-Yield Act of 1960 (74 Stat. 215; 16 U.S.C. 528–531), and public participation in the development of the program;

"(4) the new knowledge derived from coordinated public and private research programs will promote a sound technical and ecological base for effective management, use, and protection of the Nation's renewable resources;

"(5) inasmuch as the majority of the Nation's forests and rangeland is under private, State, and local governmental management and the Nation's major capacity to produce goods and services is based on these nonfederally managed renewable resources, the Federal Government should be a catalyst to encourage and assist these owners in the efficient long-term use and improvement of these lands and their renewable resources consistent with the principles of sustained yield and multiple use;

"(6) the Forest Service, by virtue of its statutory authority for management of the National Forest System, research and cooperative programs, and its role as an agency in the Department of Agriculture, has both a responsibility and an opportunity to be a leader in assuring that the Nation maintains a natural resource conservation posture that will meet the requirements of our people in perpetuity; and

"(7) recycled timber product materials are as much a part of our renewable forest resources as are the trees from which they originally came, and in order to extend our timber and timber fiber resources and reduce pressures for timber production from Federal lands, the Forest Service should expand its research in the use of recycled and waste timber product materials, develop techniques for the substitution of these secondary materials for primary materials, and promote and encourage the use of recycled timber product materials.".

REPORTS ON FIBER POTENTIAL, WOOD UTILIZATION BY MILLS, WOOD WASTES AND WOOD PRODUCT RECYCLING

16 USC 1601.

SEC. 3. Section 3 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by adding at the end thereof a new subsection (c) as follows:

"(c) The Secretary shall report in the 1979 and subsequent Assessments on:

"(1) the additional fiber potential in the National Forest System including, but not restricted to, forest mortality, growth, salvage potential, potential increased forest products sales, economic constraints, alternate markets, contract considerations, and other multiple use considerations;

"(2) the potential for increased utilization of forest and wood product wastes in the National Forest System and on other lands, and of urban wood wastes and wood product recycling, including recommendations to the Congress for actions which would lead to increased utilization of material now being wasted both in the forests and in manufactured products; and

"(3) the milling and other wood fiber product fabrication facilities and their location in the United States, noting the public and private forested areas that supply such facilities, assessing the degree of utilization into product form of harvested trees by such facilities, and setting forth the technology appropriate to the facilities to improve utilization either individually or in aggregate units of harvested trees and to reduce wasted wood fibers. The Secretary shall set forth a program to encourage the adoption by these facilities of these technologies for improving wood fiber utilization.

Program.

Public involvement, consultation.

"(d) In developing the reports required under subsection (c) of this section, the Secretary shall provide opportunity for public involvement and shall consult with other interested governmental departments and agencies.".

REFORESTATION

16 USC 1601.

SEC. 4. Section 3 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by adding at the end thereof new subsections (d) and (e) as follows:

"(d)(1) It is the policy of the Congress that all forested lands in the National Forest System shall be maintained in appropriate forest cover with species of trees, degree of stocking, rate of growth, and conditions of stand designed to secure the maximum benefits of multiple use sustained yield management in accordance with land management plans. Accordingly, the Secretary is directed to identify and report to the Congress annually at the time of submission of the President's budget together with the annual report provided for under section 8(c) of this Act, beginning with submission of the President's

Annual report to Congress.

budget for fiscal year 1978, the amount and location by forests and States and by productivity class, where practicable, of all lands in the National Forest System where objectives of land management plans indicate the need to reforest areas that have been cut-over or otherwise denuded or deforested, and all lands with stands of trees that are not growing at their best potential rate of growth. All national forest lands treated from year to year shall be examined after the first and third growing seasons and certified by the Secretary in the report provided for under this subsection as to stocking rate, growth rate in relation to potential and other pertinent measures. Any lands not certified as satisfactory shall be returned to the backlog and scheduled for prompt treatment. The level and types of treatment shall be those which secure the most effective mix of multiple use benefits.

Treated lands.
Examination, certification.

"(2) Notwithstanding the provisions of section 9 of this Act, the Secretary shall annually for eight years following the enactment of this subsection, transmit to the Congress in the manner provided in this subsection an estimate of the sums necessary to be appropriated, in addition to the funds available from other sources, to replant and otherwise treat an acreage equal to the acreage to be cut over that year, plus a sufficient portion of the backlog of lands found to be in need of treatment to eliminate the backlog within the eight-year period. After such eight-year period, the Secretary shall transmit annually to the Congress an estimate of the sums necessary to replant and otherwise treat all lands being cut over and maintain planned timber production on all other forested lands in the National Forest System so as to prevent the development of a backlog of needed work larger than the needed work at the beginning of the fiscal year. The Secretary's estimate of sums necessary, in addition to the sums available under other authorities, for accomplishment of the reforestation and other treatment of National Forest System lands under this section shall be provided annually for inclusion in the President's budget and shall also be transmitted to the Speaker of the House and the President of the Senate together with the annual report provided for under section 8(c) of this Act at the time of submission of the President's budget to the Congress beginning with the budget for fiscal year 1978. The sums estimated as necessary for reforestation and other treatment shall include moneys needed to secure seed, grow seedlings, prepare sites, plant trees, thin, remove deleterious growth and underbrush, build fence to exclude livestock and adverse wildlife from regeneration areas and otherwise establish and improve growing forests to secure planned production of trees and other multiple use values.

Replanting and treating acreage, funds, estimates; transmittal to Congress.

Annual estimates, transmittal to Congress.

"(3) Effective for the fiscal year beginning October 1, 1977, and each fiscal year thereafter, there is hereby authorized to be appropriated for the purpose of reforesting and treating lands in the National Forest System $200,000,000 annually to meet requirements of this subsection (d). All sums appropriated for the purposes of this subsection shall be available until expended.

Appropriation authorization.

"(e) The Secretary shall submit an annual report to the Congress on the amounts, types, and uses of herbicides and pesticides used in the National Forest System, including the beneficial or adverse effects of such uses.".

Annual report to Congress.

RENEWABLE RESOURCE PROGRAM

SEC. 5. Section 4 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by striking out the word "and" at the end of paragraph (3); striking out the word "satisfy" and inserting in lieu thereof "implement and monitor" in paragraph (4); striking out the period at the

16 USC 1602.

end of paragraph (4) and inserting in lieu thereof a semicolon and the word "and"; and by adding a new paragraph (5) as follows:

"(5) Program recommendations which—

"(A) evaluate objectives for the major Forest Service programs in order that multiple-use and sustained-yield relationships among and within the renewable resources can be determined;

"(B) explain the opportunities for owners of forests and rangeland to participate in programs to improve and enhance the condition of the land and the renewable resource products therefrom;

"(C) recognize the fundamental need to protect and, where appropriate, improve the quality of soil, water, and air resources;

"(D) state national goals that recognize the interrelationships between and interdependence within the renewable resources; and

"(E) evaluate the impact of the export and import of raw logs upon domestic timber supplies and prices.".

NATIONAL FOREST SYSTEM RESOURCE PLANNING

16 USC 1604.

SEC. 6. Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by adding at the end thereof new subsections (c) through (m) as follows:

Standards and guidelines, incorporation.

"(c) The Secretary shall begin to incorporate the standards and guidelines required by this section in plans for units of the National Forest System as soon as practicable after enactment of this subsection and shall attempt to complete such incorporation for all such units by no later than September 30, 1985. The Secretary shall report to the Congress on the progress of such incorporation in the annual report required by section 8(c) of this Act. Until such time as a unit of the National Forest System is managed under plans developed in accordance with this Act, the management of such unit may continue under existing land and resource management plans.

Report to Congress.

Management.

Post, p. 2956.

Public participation, meetings.

"(d) The Secretary shall provide for public participation in the development, review, and revision of land management plans including, but not limited to, making the plans or revisions available to the public at convenient locations in the vicinity of the affected unit for a period of at least three months before final adoption, during which period the Secretary shall publicize and hold public meetings or comparable processes at locations that foster public participation in the review of such plans or revisions.

Plans.

"(e) In developing, maintaining, and revising plans for units of the National Forest System pursuant to this section, the Secretary shall assure that such plans—

16 USC 528 note.

"(1) provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use Sustained-Yield Act of 1960, and, in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness; and

"(2) determine forest management systems, harvesting levels, and procedures in the light of all of the uses set forth in subsection (c)(1), the definition of the terms 'multiple use' and 'sustained yield' as provided in the Multiple-Use Sustained-Yield Act of 1960, and the availability of lands and their suitability for resource management.

"(f) Plans developed in accordance with this section shall—

"(1) form one integrated plan for each unit of the National Forest System, incorporating in one document or one set of documents, available to the public at convenient locations, all of the features required by this section;

"(2) be embodied in appropriate written material, including maps and other descriptive documents, reflecting proposed and possible actions, including the planned timber sale program and the proportion of probable methods of timber harvest within the unit necessary to fulfill the plan;

"(3) be prepared by an interdisciplinary team. Each team shall prepare its plan based on inventories of the applicable resources of the forest;

Public notice.

"(4) be amended in any manner whatsoever after final adoption after public notice, and, if such amendment would result in a significant change in such plan, in accordance with the provisions of subsections (e) and (f) of this section and public involvement comparable to that required by subsection (d) of this section; and

Revision.

"(5) be revised (A) from time to time when the Secretary finds conditions in a unit have significantly changed, but at least every fifteen years, and (B) in accordance with the provisions of subsections (e) and (f) of this section and public involvement comparable to that required by subsection (d) of this section.

Regulations.

16 USC 528 note.

"(g) As soon as practicable, but not later than two years after enactment of this subsection, the Secretary shall in accordance with the procedures set forth in section 553 of title 5, United States Code, promulgate regulations, under the principles of the Multiple-Use Sustained-Yield Act of 1960, that set out the process for the development and revision of the land management plans, and the guidelines and standards prescribed by this subsection. The regulations shall include, but not be limited to—

42 USC 4321 note.

42 USC 4332.

"(1) specifying procedures to insure that land management plans are prepared in accordance with the National Environmental Policy Act of 1969, including, but not limited to, direction on when and for what plans an environmental impact statement required under section 102(2)(C) of that Act shall be prepared;

"(2) specifying guidelines which—

"(A) require the identification of the suitability of lands for resource management;

"(B) provide for obtaining inventory data on the various renewable resources, and soil and water, including pertinent maps, graphic material, and explanatory aids; and

"(C) provide for methods to identify special conditions or situations involving hazards to the various resources and their relationship to alternative activities;

"(3) specifying guidelines for land management plans developed to achieve the goals of the Program which—

"(A) insure consideration of the economic and environmental aspects of various systems of renewable resource management, including the related systems of silviculture and protection of forest resources, to provide for outdoor recreation (including wilderness), range, timber, watershed, wildlife, and fish;

"(B) provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide, where appropriate, include requirements to provide information on a representative sample basis of estimated expenditures associated with the reforestation, timber stand improvement, and sale of timber from the National Forest System, and shall provide a comparison of these expenditures to the return to the Government resulting from the sale of timber; and

"(2) include a summary of data and findings resulting from these estimates as a part of the annual report required pursuant to section 8(c) of this Act, including an identification on a representative sample basis of those advertised timber sales made below the estimated expenditures for such timber as determined by the above cost process; and

Standards, establishment.

"(m) The Secretary shall establish—

"(1) standards to insure that, prior to harvest, stands of trees throughout the National Forest System shall generally have reached the culmination of mean annual increment of growth (calculated on the basis of cubic measurement or other methods of calculation at the discretion of the Secretary): *Provided*, That these standards shall not preclude the use of sound silvicultural practices, such as thinning or other stand improvement measures: *Provided further*, That these standards shall not preclude the Secretary from salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow or other catastrophe, or which are in imminent danger from insect or disease attack; and

"(2) exceptions to these standards for the harvest of particular species of trees in management units after consideration has been given to the multiple uses of the forest including, but not limited to, recreation, wildlife habitat, and range and after completion of public participation processes utilizing the procedures of subsection (d) of this section.".

NATIONAL PARTICIPATION

16 USC 1606.

SEC. 7. Section 8 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended—

(a) by striking out "sixty" in the second sentence of subsection (a) and inserting in lieu thereof the word "ninety"; and by striking out "sixty-day period" in the third sentence of subsection (a) and inserting in lieu thereof "ninety-day period"; and

(b) by adding a new sentence at the end of subsection (c) as follows: "With regard to the research component of the program, the report shall include, but not be limited to, a description of the status of major research programs, significant findings, and how these findings will be applied in National Forest System management.".

TRANSPORTATION SYSTEM

16 USC 1608.

SEC. 8. Section 10 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by inserting "(a)" immediately before the words "The Congress" and inserting at the end thereof new subsections (b) and (c) as follows:

Road design.

"(b) Unless the necessity for a permanent road is set forth in the forest development road system plan, any road constructed on land of the National Forest System in connection with a timber contract or other permit or lease shall be designed with the goal of reestablishing "(v) such cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource.

Committee, appointment.

"(h)(1) In carrying out the purposes of subsection (g) of this section, the Secretary of Agriculture shall appoint a committee of scientists who are not officers or employees of the Forest Service. The committee shall provide scientific and technical advice and counsel on proposed guidelines and procedures to assure that an effective interdisciplinary approach is proposed and adopted. The committee shall terminate upon promulgation of the regulations, but the Secretary may, from time to time, appoint similar committees when considering revisions of the regulations. The views of the committees shall be included in the public information supplied when the regulations are proposed for adoption.

Termination.

"(2) Clerical and technical assistance, as may be necessary to discharge the duties of the committee, shall be provided from the personnel of the Department of Agriculture.

Compensation and travel expenses.

"(3) While attending meetings of the committee, the members shall be entitled to receive compensation at a rate of $100 per diem, including traveltime, and while away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for persons in the Government service employed intermittently.

"(i) Resource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans. Those resource plans and permits, contracts, and other such instruments currently in existence shall be revised as soon as practicable to be made consistent with such plans. When land management plans are revised, resource plans and permits, contracts, and other instruments, when necessary, shall be revised as soon as practicable. Any revision in present or future permits, contracts, and other instruments made pursuant to this section shall be subject to valid existing rights.

"(j) Land management plans and revisions shall become effective thirty days after completion of public participation and publication of notification by the Secretary as required under section 6(d) of this Act.

"(k) In developing land management plans pursuant to this Act, the Secretary shall identify lands within the management area which are not suited for timber production, considering physical, economic, and other pertinent factors to the extent feasible, as determined by the Secretary, and shall assure that, except for salvage sales or sales necessitated to protect other multiple-use values, no timber harvesting shall occur on such lands for a period of 10 years. Lands once identified as unsuitable for timber production shall continue to be treated for reforestation purposes, particularly with regard to the protection of other multiple-use values. The Secretary shall review his decision to classify these lands as not suited for timber production at least every 10 years and shall return these lands to timber production whenever he determines that conditions have changed so that they have become suitable for timber production.

Review.

"(l) The Secretary shall—

"(1) formulate and implement, as soon as practicable, a process for estimating long-terms costs and benefits to support the program evaluation requirements of this Act. This process shall include requirements to provide information on a representative sample basis of estimated expenditures associated with the reforestation, timber stand improvement, and sale of timber from the National Forest System, and shall provide a comparison of these expenditures to the return to the Government resulting from the sale of timber; and

"(2) include a summary of data and findings resulting from these estimates as a part of the annual report required pursuant to section 8(c) of this Act, including an identification on a representative sample basis of those advertised timber sales made below the estimated expenditures for such timber as determined by the above cost process; and

Standards, establishment.

"(m) The Secretary shall establish—

"(1) standards to insure that, prior to harvest, stands of trees throughout the National Forest System shall generally have reached the culmination of mean annual increment of growth (calculated on the basis of cubic measurement or other methods of calculation at the discretion of the Secretary): *Provided*, That these standards shall not preclude the use of sound silvicultural practices, such as thinning or other stand improvement measures: *Provided further*, That these standards shall not preclude the Secretary from salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow or other catastrophe, or which are in imminent danger from insect or disease attack; and

"(2) exceptions to these standards for the harvest of particular species of trees in management units after consideration has been given to the multiple uses of the forest including, but not limited to, recreation, wildlife habitat, and range and after completion of public participation processes utilizing the procedures of subsection (d) of this section.".

NATIONAL PARTICIPATION

16 USC 1606.

SEC. 7. Section 8 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended—

(a) by striking out "sixty" in the second sentence of subsection (a) and inserting in lieu thereof the word "ninety"; and by striking out "sixty-day period" in the third sentence of subsection (a) and inserting in lieu thereof "ninety-day period"; and

(b) by adding a new sentence at the end of subsection (c) as follows: "With regard to the research component of the program, the report shall include, but not be limited to, a description of the status of major research programs, significant findings, and how these findings will be applied in National Forest System management.".

TRANSPORTATION SYSTEM

16 USC 1608.

SEC. 8. Section 10 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by inserting "(a)" immediately before the words "The Congress" and inserting at the end thereof new subsections (b) and (c) as follows:

Road design.

"(b) Unless the necessity for a permanent road is set forth in the forest development road system plan, any road constructed on land of the National Forest System in connection with a timber contract or other permit or lease shall be designed with the goal of reestablishing vegetative cover on the roadway and areas where the vegetative cover has been disturbed by the construction of the road, within ten years after the termination of the contract, permit, or lease either through artificial or natural means. Such action shall be taken unless it is later determined that the road is needed for use as a part of the National Forest Transportation System.

"(c) Roads constructed on National Forest System lands shall be designed to standards appropriate for the intended uses, considering safety, cost of transportation, and impacts on land and resources.". Road construction.

NATIONAL FOREST SYSTEM

SEC. 9. Section 11(a) of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by adding at the end thereof the following new sentence: "Notwithstanding the provisions of the Act of June 4, 1897 (30 Stat. 34; 16 U.S.C. 473), no land now or hereafter reserved or withdrawn from the public domain as national forests pursuant to the Act of March 3, 1891 (26 Stat. 1103; 16 U.S.C. 471), or any act supplementary to and amendatory thereof, shall be returned to the public domain except by an act of Congress.". 16 USC 1609.

RENEWABLE RESOURCES

SEC. 10. Section 12 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as redesignated by section 2 of this Act, is amended by striking out the period at the end of that section and inserting in lieu thereof the following: "and on the date of enactment of any legislation amendatory or supplementary thereto.". 16 USC 1610.

LIMITATIONS ON TIMBER REMOVAL; PUBLIC PARTICIPATION AND ADVISORY BOARDS; REGULATIONS; SEVERABILITY

SEC. 11. The Forest and Rangeland Renewable Resources Planning Act of 1974 is amended by adding at the end thereof new sections 13 through 16 as follows:

"SEC. 13. LIMITATIONS ON TIMBER REMOVAL.—(a) The Secretary of Agriculture shall limit the sale of timber from each national forest to a quantity equal to or less than a quantity which can be removed from such forest annually in perpetuity on a sustained-yield basis: *Provided*, That, in order to meet overall multiple-use objectives, the Secretary may establish an allowable sale quantity for any decade which departs from the projected long-term average sale quantity that would otherwise be established: *Provided further*, That any such planned departure must be consistent with the multiple-use management objectives of the land management plan. Plans for variations in the allowable sale quantity must be made with public participation as required by section 6(d) of this Act. In addition, within any decade, the Secretary may sell a quantity in excess of the annual allowable sale quantity established pursuant to this section in the case of any national forest so long as the average sale quantities of timber from such national forest over the decade covered by the plan do not exceed such quantity limitation. In those cases where a forest has less than two hundred thousand acres of commercial forest land, the Secretary may use two or more forests for purposes of determining the sustained yield. 16 USC 1611. Sales.

"(b) Nothing in subsection (a) of this section shall prohibit the Secretary from salvage or sanitation harvesting of timber stands which are substantially damaged by fire, windthrow, or other catastrophe, or which are in imminent danger from insect or disease attack. The Secretary may either substitute such timber for timber that would otherwise be sold under the plan or, if not feasible, sell such timber over and above the plan volume.

Hearings, notice. 16 USC 1612.

"SEC. 14. PUBLIC PARTICIPATION AND ADVISORY BOARDS.—(a) In exercising his authorities under this Act and other laws applicable to the Forest Service, the Secretary, by regulation, shall establish procedures, including public hearings where appropriate, to give the Federal, State, and local governments and the public adequate notice and an opportunity to comment upon the formulation of standards, criteria, and guidelines applicable to Forest Service programs.

Advisory boards. Establishment. 5 USC app. I. Membership.

"(b) In providing for public participation in the planning for and management of the National Forest System, the Secretary, pursuant to the Federal Advisory Committee Act (86 Stat. 770) and other applicable law, shall establish and consult such advisory boards as he deems necessary to secure full information and advice on the execution of his responsibilities. The membership of such boards shall be representative of a cross section of groups interested in the planning for and management of the National Forest System and the various types of use and enjoyment of the lands thereof.".

16 USC 1613.

"SEC. 15. REGULATIONS.—The Secretary of Agriculture shall prescribe such regulations as he determines necessary and desirable to carry out the provisions of this Act.

16 USC 1614.

"SEC. 16. SEVERABILITY.—If any provision of this Act or the application thereof to any person or circumstances is held invalid, the validity of the remainder of the Act and of the application of such provision to other persons and circumstances shall not be affected thereby.".

CONFORMING AMENDMENTS TO THE FOREST AND RANGELAND RENEWABLE RESOURCES PLANNING ACT OF 1974

SEC. 12. The Forest and Rangeland Renewable Resources Planning Act of 1974 is amended as follows:

16 USC 1604.

(a) Section 6(a), as redesignated by section 2 of this Act, is amended by striking out "section 3" and inserting in lieu thereof "section 4".

16 USC 1606.

(b) Section 8, as redesignated by section 2 of this Act, is amended—

(1) by striking out "section 2" and "section 3" in the first sentence of subsection (a) and inserting in lieu thereof "section 3" and "section 4", respectively;

(2) by striking out "section 3" in subsection (c) and inserting in lieu thereof "section 4"; and

(3) by striking out "section 3" in the first sentence of subsection (d) and inserting in lieu thereof "section 4".

AMENDMENT TO THE ORGANIC ACT

Repeal.

SEC. 13. The twelfth undesignated paragraph under the heading "SURVEYING THE PUBLIC LANDS" in the Act of June 4, 1897 (30 Stat. 35, as amended; 16 U.S.C. 476), is hereby repealed.

TIMBER SALES ON NATIONAL FOREST SYSTEM LANDS

Rules and regulations. 16 USC 472a.

SEC. 14. (a) For the purpose of achieving the policies set forth in the Multiple-Use Sustained-Yield Act of 1960 (74 Stat. 215; 16 U.S.C.

528-531) and the Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476; 16 U.S.C. 1601-1610), the Secretary of Agriculture, under such rules and regulations as he may prescribe, may sell, at not less than appraised value, trees, portions of trees, or forest products located on National Forest System lands.

Maps and prospectus.

(b) All advertised timber sales shall be designated on maps, and a prospectus shall be available to the public and interested potential bidders.

Contract.

Ante, p. 2952.

16 USC 528 note.

Filing.

(c) The length and other terms of the contract shall be designed to promote orderly harvesting consistent with the principles set out in section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended. Unless there is a finding by the Secretary of Agriculture that better utilization of the various forest resources (consistent with the provisions of the Multiple-Use Sustained-Yield Act of 1960) will result, sales contracts shall be for a period not to exceed ten years: *Provided*, That such period may be adjusted at the discretion of the Secretary to provide additional time due to time delays caused by an act of an agent of the United States or by other circumstances beyond the control of the purchaser. The Secretary shall require the purchaser to file as soon as practicable after execution of a contract for any advertised sale with a term of two years or more, a plan of operation, which shall be subject to concurrence by the Secretary. The Secretary shall not extend any contract period with an original term of two years or more unless he finds (A) that the purchaser has diligently performed in accordance with an approved plan of operation or (B) that the substantial overriding public interest justifies the extension.

Sales, advertisement.

(d) The Secretary of Agriculture shall advertise all sales unless he determines that extraordinary conditions exist, as defined by regulation, or that the appraised value of the sale is less than $10,000. If, upon proper offering, no satisfactory bid is received for a sale, or the bidder fails to complete the purchase, the sale may be offered and sold without further advertisement.

Collusive practices, obviation.

(e) The Secretary of Agriculture shall take such action as he may deem appropriate to obviate collusive practices in bidding for trees, portions of trees, or forest products from National Forest System lands, including but not limited to—

(1) establishing adequate monitoring systems to promptly identify patterns of noncompetitive bidding;

(2) requiring sealed bidding on all sales except where the Secretary determines otherwise by regulation; and

Report, submittal to Attorney General.

(3) requiring that a report of instances of such collusive practices or patterns of noncompetitive bidding be submitted to the Attorney General of the United States with any and all supporting data.

Rules and regulations.

(f) The Secretary of Agriculture, under such rules and regulations as he may prescribe, is authorized to dispose of, by sale or otherwise, trees, portions of trees, or other forest products related to research and demonstration projects.

(g) Designation, marking when necessary, and supervision of harvesting of trees, portions of trees, or forest products shall be conducted by persons employed by the Secretary of Agriculture. Such persons shall have no personal interest in the purchase or harvest of such products and shall not be directly or indirectly in the employment of the purchaser thereof.

Standards, methods, and practices.

(h) The Secretary of Agriculture shall develop utilization standards, methods of measurement, and harvesting practices for the removal of trees, portions of trees, or forest products to provide for the optimum practical use of the wood material. Such standards, methods, and practices shall reflect consideration of opportunities to promote more effective wood utilization, regional conditions, and species characteristics and shall be compatible with multiple use resource management objectives in the affected area. To accomplish the purpose of this subsection in situations involving salvage of insect-infested, dead, damaged, or down timber, and to remove associated trees for stand improvement, the Secretary is authorized to require the purchasers of such timber to make monetary deposits, as a part of the payment for the timber, to be deposited in a designated fund from which sums are to be used, to cover the cost to the United States for design, engineering, and supervision of the construction of needed roads and the cost for Forest Service sale preparation and supervision of the harvesting of such timber. Deposits of money pursuant to this subsection are to be available until expended to cover the cost to the United States of accomplishing the purposes for which deposited: *Provided*, That such deposits shall not be considered as moneys received from the national forests within the meaning of sections 500 and 501 of title 16, United States Code: *And provided further*, That sums found to be in excess of the cost of accomplishing the purposes for which deposited on any national forest shall be transferred to miscellaneous receipts in the Treasury of the United States.

Monetary deposits.

Road construction, regulations.

(i)(1) For sales of timber which include a provision for purchaser credit for construction of permanent roads with an estimated cost in excess of $20,000, the Secretary of Agriculture shall promulgate regulations requiring that the notice of sale afford timber purchasers qualifying as "small business concerns" under the Small Business Act, as amended, and the regulations issued thereunder, an estimate of the cost and the right, when submitting a bid, to elect that the Secretary build the proposed road: *Provided*, That the provisions of this subsection shall not apply to sales of timber on National Forest System lands in the State of Alaska.

15 USC 631 note.

Alaskan lands, exception.

Completion date.

(2) If the purchaser makes such an election, the price subsequently paid for the timber shall include all of the estimated cost of the road. In the notice of sale, the Secretary of Agriculture shall set a date when such road shall be completed which shall be applicable to either construction by the purchaser or the Secretary, depending on the election. To accomplish requested work, the Secretary is authorized to use from any receipts from the sale of timber a sum equal to the estimate for timber purchaser credits, and such additional sums as may be appropriated for the construction of roads, such funds to be available until expended, to construct a road that meets the standards specified in the notice of sale.

Effective date.

(3) The provisions of this subsection shall become effective on October 1, 1976.

VALIDATION OF TIMBER SALES CONTRACTS

16 USC 476 note.

SEC. 15. (a) Timber sales made pursuant to the Act of June 4, 1897 (30 Stat. 35, as amended; 16 U.S.C. 476), prior to the date of enactment of this section shall not be invalid if the timber was sold in accord with Forest Service silvicultural practices and sales procedures in effect at the time of the sale, subject to the provisions of subsection (b) of this section.

Revision.

(b) The Secretary of Agriculture is directed, in developing five-year operating plans under the provisions of existing fifty-year timber sales contracts in Alaska, to revise such contracts to make them consistent with the guidelines and standards provided for in the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, and to reflect such revisions in the contract price of timber. Any such action shall not be inconsistent with valid contract rights approved by the final judgment of a court of competent jurisdiction.

16 USC 1601 note.

PAYMENTS TO STATES FOR SCHOOLS AND ROADS

SEC. 16. The sixth paragraph under the heading "FOREST SERVICE" in the Act of May 23, 1908, as amended, and section 13 of the Act of March 1, 1911, as amended (35 Stat. 260, 36 Stat. 963, as amended; 16 U.S.C. 500), are each amended by adding at the end thereof, respectively, the following new sentence: "Beginning October 1, 1976, the term 'moneys received' shall include all collections under the Act of June 9, 1930, and all amounts earned or allowed any purchaser of national forest timber and other forest products within such State as purchaser credits, for the construction of roads on the National Forest Transportation System within such national forests or parts thereof in connection with any Forest Service timber sales contract. The Secretary of Agriculture shall, from time to time as he goes through his process of developing the budget revenue estimates, make available to the States his current projections of revenues and payments estimated to be made under the Act of May 23, 1908, as amended, or any other special Acts making payments in lieu of taxes, for their use for local budget planning purposes.".

"Moneys received."

Projections, availability to States.

ACQUISITION OF NATIONAL FOREST SYSTEM LANDS

SEC. 17. (a) The Act of March 1, 1911 (36 Stat. 961), as amended (16 U.S.C. 480, 500, 513–517, 517a, 518, 519, 521, 552, 563), is amended as follows:

(1) Section 4, as amended, is repealed, and all functions of the National Forest Reservation Commission are transferred to the Secretary of Agriculture.

Repeal.
Transfer of functions.
16 USC 513.

(2) Section 5 is repealed.

Repeal.
16 USC 513.

(3) Section 6 is amended to read as follows: "The Secretary of Agriculture is hereby authorized and directed to examine, locate, and purchase such forested, cut-over, or denuded lands within the watersheds of navigable streams as in his judgment may be necessary to the regulation of the flow of navigable streams or for the production of timber. No deed or other instrument of conveyance of lands referred to herein shall be accepted or approved by the Secretary of Agriculture under this Act until the legislature of the State in which the land lies shall have consented to the acquisition of such land by the United States for the purpose of preserving the navigability of navigable streams.".

16 USC 515.

(4) Section 7, as amended, is amended to read as follows: "When the public interests will be benefited thereby, the Secretary of Agriculture is hereby authorized, in his discretion, to accept on behalf of the United States title to any lands within the exterior boundaries of national forests which, in his opinion, are chiefly valuable for the purposes of this Act, and in exchange therefor to convey by deed not to exceed an equal value of such national forest land in the same State, or he may authorize the grantor to cut and remove an equal value of timber within such national forests in the same State, the values in each case to be determined by him: *Provided*, That before any such exchange is effected notice of the contemplated exchange reciting the lands involved shall be published once each week for four successive

16 USC 516.
Land exchange.

Notice, publication in newspapers.

weeks in some newspaper of general circulation in the county or counties in which may be situated the lands to be accepted, and in some like newspaper published in any county in which may be situated any lands or timber to be given in such exchange. Timber given in such exchanges shall be cut and removed under the laws and regulations relating to such national forests, and under the direction and supervision and in accordance with the requirements of the Secretary of Agriculture. Lands so accepted by the Secretary of Agriculture shall, upon acceptance, become parts of the national forests within whose exterior boundaries they are located, and be subjected to all provisions of this Act.".

16 USC 518.

(5) Section 9, as amended, is amended by striking out the following language in the first sentence: "the National Forest Reservation Commission and".

Repeal.
16 USC 514.

(6) Section 14, as amended, is repealed.

Forest land acquisitions, report to congressional committees.
16 USC 521b.

(b) For purposes of providing information that will aid the Congress in its oversight responsibilities and improve the accountability of expenditures for the acquisition of forest land, the Secretary of Agriculture may not hereafter enter into any land purchase or exchange relating to the National Forest System of $25,000 or more for the types of lands which have been heretofore approved by the National Forest Reservation Commission until after 30 days from the date upon which a detailed report of the facts concerning such proposed purchase or transfer is submitted to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture and Forestry of the Senate or such earlier time as may be approved by both such committees. Such report shall contain at least the following:

(1) guidelines utilized by the Secretary in determining that the land should be acquired;

(2) the location and size of the land;

(3) the purchase price of the land and the criteria used by the Secretary in determining such price; and

(4) the person from whom the land is being acquired.

AMENDMENT TO THE KNUTSON-VANDENBERG ACT

SEC. 18. Section 3 of the Act of June 9, 1930 (46 Stat. 527; 16 U.S.C. 576b), is amended—

(a) by striking out the word "or" immediately before "(3)" in the first sentence thereof; and

(b) by striking out in the first sentence thereof the colon preceding the proviso and all that follows down through "three years" and inserting in lieu thereof the following: ", or (4) protecting and improving the future productivity of the renewable resources of the forest land on such sale area, including sale area improvement operations, maintenance and construction, reforestation and wildlife habitat management".

AMENDMENT TO THE ACT OF JUNE 12, 1960

SEC. 19. The Act of June 12, 1960 (74 Stat. 215; 16 U.S.C. 528–531), is amended by adding at the end thereof the following new section:

Short title.
16 USC 528 note.

"SEC. 5. This Act may be cited as the 'Multiple-Use Sustained-Yield Act of 1960'.".

PLAN FOR CONTROL OF DUTCH ELM DISEASE

Study, evaluation.
16 USC 594-2 note.

SEC. 20. The Secretary of Agriculture, in consultation with officials of both the States and political subdivisions thereof, shall conduct a study of the incidence of Dutch elm disease and evaluate methods for controlling the spread of such disease. The Secretary shall prepare and submit to the President and both Houses of the Congress on or before March 1, 1977, a report which includes—

Report, submittal to President and Congress.

(1) the results of such study;

(2) plans for further research into the control of Dutch elm disease; and

(3) an action plan which includes a program of outreach and public information about the disease, and recommendations for controlling the spread of the disease.

SEVERABILITY

16 USC 1600 note.

SEC. 21. If any provision of this Act or the application thereof to any person or circumstances is held invalid, the validity of the remainder of the Act and of the application of such provision to other persons and circumstances shall not be affected thereby.

Approved October 22, 1976.

LEGISLATIVE HISTORY:

HOUSE REPORT: No. 94-1478, pt. 1 accompanying H.R. 15069 (Comm. on Agriculture) and No. 94-1478, pt. 2 accompanying H.R. 15069 (Comm. on Interior and Insular Affairs) and No. 94-1735 (Comm. of Conference).
SENATE REPORT: No. 94-893 (Comm. on Agriculture and Forestry) and No. 94-905 (Comm. on Interior and Insular Affairs) and No. 94-1335 (Comm. of Conference).
CONGRESSIONAL RECORD, Vol. 122 (1976):
    Aug. 25, considered and passed Senate.
    Sept. 15, 17, considered and passed House, amended, in lieu of H.R. 15069.
    Sept. 30, Senate and House agreed to conference report.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 12, No. 44:
    Oct. 22, Presidential statement.

Note.—A change has been made in the slip law format to provide for one-time preparation of copy to be used for publication of both slip laws and the United States Statutes at Large volumes. Comments from users are invited by the Office of the Federal Register, National Archives and Records Service, Washington, D.C. 20408.

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